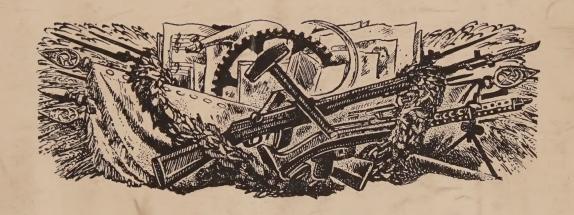
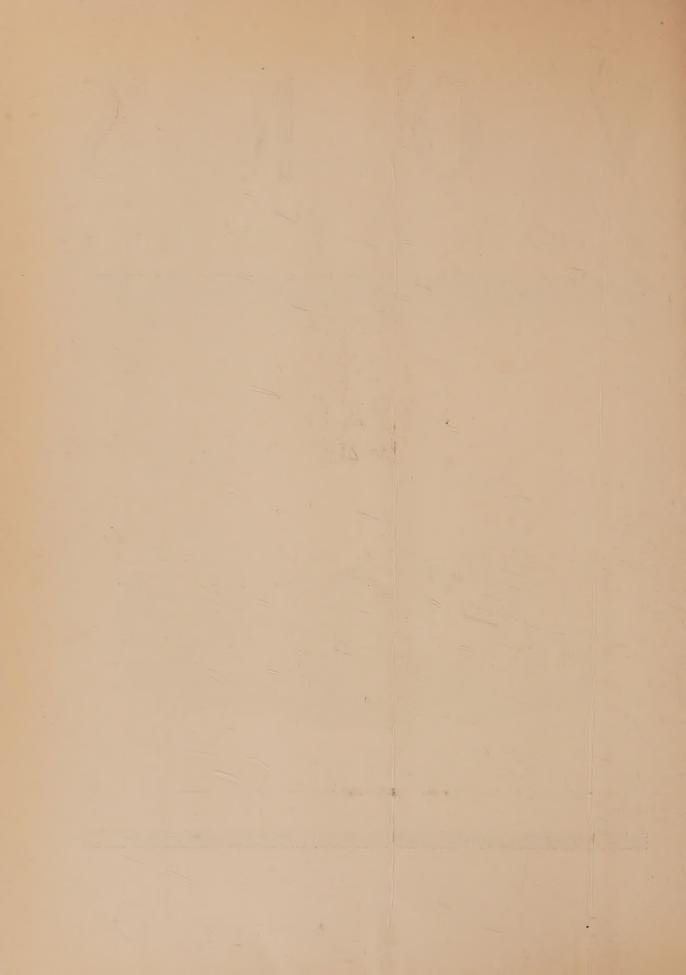
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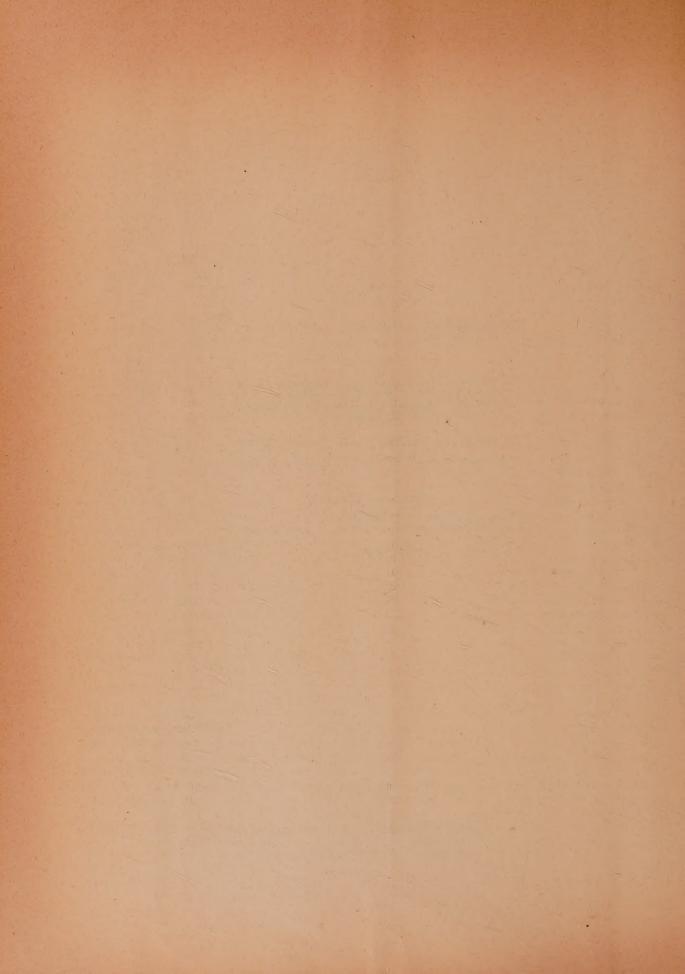
Editor - in - Chief
VLADIMIR KEMENOV

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STRATEGIC OBJECTIVE

By Major-General M. Galaktionov

(Continuation)

III. STALINGRAD

MILITARY history deals with phenomena that cannot be reproduced in the manner of chemical phenomena reproduced again and again at the will of the chemist in his laboratory. To make a scientific study of military history one must turn to past wars and battles, to compare similar situations and decisions. In considering the Stalingrad epic of 1942, however, we are confronted with a compaign without precedent in military history.

Can any one imagine such an extreme situation? The Germans had taken the richest districts of the country and had reached the Volga. They were threatening to cut off the last ties linking us with the South, with our source of oil-the black bread of war. Even our friends abroad considered the defeat of the Red Army a foregone conclusion. Perhaps at that time they did not yet fully realize that defeat of the Soviet Union would have meant Germany's victory in the world war. The fate of mankind hung in the balance. From this extreme situation victory was born. The German military machine was crushed at the very moment of its greatest success. It was like a miracle. And Stalingrad has become holy ground for all mankind, and all men bow in reverence to it although not all can understand it.

Today, however, it is already obvious that the great victory sustained by the Red Army at Stalingrad was really the triumph of brilliant thinking, clear planning and scientific vision.

The analysis of the campaign of 1942 made by Marshal Stalin serves as the cornerstone of any scientific explanation. It contains some of the most important basic principles of modern military science.

Moscow-Baku

Judging by the importance that Stalingrad acquired in the course of the campaign of 1942 and by the stubbornness with which the Germans strove to capture it, one might have concluded that Stalingrad was the strategic objective in the German offensive of 1942. Such a conclusion, however, would have been hasty. Let us consider the plan of the German Command in greater detail.

In the summer of 1942, in distinction to their preceding campaigns, the Germans, as we all know, advanced on only one direction.

"Taking advantage of the absence of a second front in Europe, the Germans and their allies transferred all their available reserves to the eastern front and, massing them on one direction—the southwestern direction—created a great superiority of forces and achieved substantial tactical gains."

On 6 November, 1942, Marshal Stalin said: "Apparently the Germans are no longer strong enough to conduct a simultaneous offensive in all three directions—in the South, North and Centre—as was the case in the early months of the German offensive in the summer of last year; but they are still strong enough to organize a serious offensive in some one direction."

One might conclude that the decision to advance on only one direction indicated that the Hitler strategists had come to see reason. They renounced the plan they had followed in their campaign of 1941. But they could not help themselves. The Red Army had completely shattered the Hitlerite's basic plan of war

In making Leningrad—Moscow—Rostov their objectives in the first months of the war, the German Command had planned to reach them in lightning order, crushing the forces of the Red Army literally on the march. These plans had fallen through and now the German army, spread over a huge front, was opposed by a Red Army that was much stronger than it had been at the beginning of the war and that was constantly growing stronger.

Naturally, the strategic significance of Leningrad and Moscow did not diminish. On the contrary, it grew still greater. In the fighting to capture these cities the Germans could have counted on routing the main forces of the Red Army. But there is many a slip 'twixt the cup and the lip. Although the Germans had exerted every effort to capture these two great Russian cities when conditions were much more favourable, nothing had come of their attempts.

Of course the Germans could have activated their allies, the Finns, and flung in large forces for a decisive attack upon Leningrad, but they had already suffered bitter experiences there. They knew that they would thereby be starting a fierce battle that would swallow up tremendous forces without offering the least prospect of rapidly developing

any successes they might gain.

Nor had a direct attack against Moscow any chance of success. The Germans now knew that Moscow was covered by the main forces of the Red Army. True, the German Command might have hoped to attain a superiority of forces in this region despite all the odds, but an important role was played by a factor that we shall deal with in this chapter-the factor of morale. Could any more favourable situation for the capture of Moscow have been created than that which developed in November 1941? Yet it was in just this favourable situation that the Germans suffered a crushing defeat. To lead their troops along roads that had witnessed the defeat and flight of the "invincible" German army was a gamble that even the Hitlerite adventurists dared not take.

All this brought faint echoes of a funeral dirge to their ears. Beginning in the north and running through the central sector to the south, the fortified front became more and more settled and stable. Fortifications were erected on both sides, the fire power of the various sectors was intensified and military activities assumed an attritional character.

This was advantageous, of course, to the Red Army, which under cover of this defensive front augmented its forces. To the Hitlerites this prospect signified the loss of the war.

At Leningrad the Germans built concrete pill boxes. Had they not lacked all sense of humour they would have realized how ridiculous they made themselves in the eyes of the world. What! To come up to the walls of Leningrad and then be stricken with fear of its defenders and fence themselves off from them with pill boxes! This was, indeed, a caricature of Hitler's boasts of grandeur! But humour is a sign of culture. Only people can laugh, whereas the Germans were nothing more than "blonde beasts". They poured their satanic fury upon the women and children of Leningrad, who in the winter of 1941-1942 died of hunger, but did not surrender. The Hitlerites failed to realize that victory, the coming victory of the Soviet people, was born of the sufferings of this heroic city.

Further to the south the front did not run in a straight line, but sometimes assumed fancy contours. The Kalinin front formed a huge wedge in the west, overhanging an important line of communication—the Smolensk railroad line. It is amazing to think that this front could have held out in this form for two whole years. Judging externally, this bulge offered rich opportunities for maneuvring operations. But the Germans had now had time to learn something of the geography of Russia. In this region of forests and swamps any attempt to maneuvre mobile forces was inevitably frustrated. Thus the front stabilized, bulging to the west for hundreds of kilometres.

Of course both sides held their strategic reserves—the main mass of their best troops behind the line of the front. Notwithstanding this, the front swallowed up tremendous forces. Numerous German divisions were chained down on directions where the German Command could no longer count on any strategic advantages. These formations had to be constantly furnished with all kinds of food supplies in addition to armaments and ammunition, for small-scale operations never stopped for a single hour. The Germans had to transport huge quantities of war materiel through occupied territory that refused to submit to their rule. The wide-spread guerilla movement perpetually harried these lines of communication.

In 1942 the war shifted to the south. In our study, however, we must not for a minute lose track of the outstanding role played by the North and the Centre in the campaign of 1942. The successes of the Germans in this campaign had no decisive significance because most of the Soviet front stood firm and inviolable. This was the result of the great victory won by the Red Army in 1941. During the severe trials of 1942 Moscow and Leningrad stretched a hand of fraternal support across the vast spaces to Stalingrad, the new giant that was inscribing its name alongside of theirs in the annals of history.

Further, north of Leningrad up to Murmansk, Soviet infantry and sailors stood their ground with honour. They held firm the extreme northern end of the mighty barrier when the Germans shook it in the south. Stalingrad was the victory of the whole Red Army and Red Navy, the victory of the whole Soviet people.

Advancing in the south, the Germans counted on making the most of the serious advantages that still remained to them, especially their numerical superiority which was particularly marked in regard to tanks and aircraft. In the summer of 1942 Germany and her satellites had 240 divisions on the Eastern front. The Germans had concentrated the main mass of these troops on the sector of the front stretching from Orel to Lozovaya, a distance of 500 kilometres. This ensured them a considerable superiority of forces on this direction.

The southern part of the front offered the Germans the greatest opportunity for maneuvring. In this section the front was not yet firmly stabilized. Battles had been raging since the spring of 1942 and the line of the front constantly shifted. It was just on this direction that the German Command could expect to make a breach most easily. Should their breach be successful, the German troops could reach the vital districts of the Soviet Union, which they had already approached very closely, much more quickly than in 1941. Hitler dreamt of successfully concluding here the march begun in 1941 and checked by the Red Army on lines far to the east.

In distinction to 1941, the task was now to breach a front being held by Red Army troops that were constantly being strengthened by reinforcements from the rear, that were being supplied materiel in ever increasing quantities, and that were daily growing stronger in battle. We already know that when there is a fortified front a breakthrough operation is so serious a matter that it very largely determines the choice of a strategic objective.

In the campaign of 1941 the strategic objective of the German offensive in the south was Rostov. We considered this question in the first chapter and showed that Rostov was only one of three strategic objectives. In the campaign of 1942 the German capture of Rostov was of still lesser moment. This was only the beginning of their offensive operations and not the conclusion. At this time Rostov was not far behind the front and its capture was far from signifying the operational completion of the break-through. The Soviet front merely moved further east, preserving in its rear important communication lines linking the country with the Caucasus.

After breaking through our south-western front, the Germans, as we all know, struck out towards the south, took Rostov and then continued to advance to the southeast. They sent large forces here and, judging by the scale of their operations, it might have been thought that they were pursuing important objectives. Marshal Stalin indicated otherwise in his speech of 6 November, 1942:

"What was the main objective of the German fascist strategists when they launched their summer offensive on our front? Judging by the comments of the foreign press, including the German, one might think that the main objective of the offensive was to capture the oil districts of Grozny and Baku. But facts decidedly refute this assumption. Facts show that the German advance towards the oil districts of the U. S. S. R. is not the main, but an auxiliary objective."

Had the Germans succeeded in capturing Soviet oil districts and the Caucasus, they would thereby have greatly undermined the military might of the U. S. S. R. and have obtained tremendous resources for the further conduct of the war. Hitler obviously pursued this aim and dispatched part of his forces to the North Caucasus to attain it. However, even this adventurist realized that

to attempt to conquer the Caucasus with only Rostov as a narrow gate leading to it was an extremely wild undertaking: by its counterthrusts the Red Army could have shut these gates again and cut off the German troops advancing on the North Caucasus.

Here we return to the question we asked before: was not Stalingrad the strategic objective of the German offensive? All the data of military science indicate that it was. Stalingrad was the strategic key to the whole southern theatre—the Don, the lower Volga region, the North Caucasus. By keeping Stalingrad in its own hands the Red Army ensured railroad and water communications with the Caucasus and remained in a position to threaten the German troops with powerful blows as they advanced southeast of Rostov. If, on the contrary, the Hitlerites captured Stalingrad, they would have cut off all railroad communications linking the Centre with the South. In that case the Germans could also have counted on taking Astrakhan.

Let us note that such an outcome would have signified the consummation of the breakthrough and in this respect it would have been correct to consider Stalingrad the Germans' strategic objective. After having created a powerful springboard on the Don and in the Lower Volga region the Germans could have developed operations in both the North and the South.

Undoubtedly these ideas influenced the German Command, and that explains why they fought so stubbornly to take Stalingrad. Nevertheless, Stalingrad was not the strategic objective of the Germans, at any rate as far as the original plan of their campaign went. We are searching for logic and scientific basis in this plan, forgetting that the Hitlerites were, first and foremost, adventurists.

What, indeed, would the plan of an offensive with Stalingrad as its strategic objective have meant for them? It would have been the plan of a very difficult and vast campaign that would have required months for its execution. Of course, once the strategic objective was obtained they could at once have followed up their success with operations for capturing the Caucasus. But how much time and what vast forces would these operations have required? Moreover, what would have been happening meanwhile in the North? Would the Soviet Command have

waited until the Hitlerites thought fit to act in the South? After all, the main masses of the Red Army's forces were still covering Moscow, and even the Hitlerite adventurists realized that no decisive victory was possible until this main mass of Soviet troops was defeated.

The purpose of the German Offensive was further analyzed by Stalin in his November speech, made before our own offensive began:

"What, then, was the main objective of the German offensive? It was to outflank Moscow from the East; to cut it off from its Volga and Urals rear and then to strike at the city. The German advance southwards, towards the oil districts, had an auxiliary purpose; not only, and not so much, to capture the oil districts as to divert our main reserves to the South and to weaken the Moscow front, and thereby facilitate the success of the blow at Moscow. This, in fact, explains why the main group of the German forces are now in the Orel and the Stalingrad areas, and not in the South.

"Recently, an officer of the German General Staff fell into the hands of our men. On this officer a map was found showing the plan and schedule of the German troops' advance. From this document it is evident that the Germans intended to be in Borisoglebsk on 10 July, this year, in Stalingrad on 25 July, in Saratov on 10 August, in Kuibyshev on 15 August, in Arzamas on 10 September, and in Baku on 25 September.

"This document fully confirms the information in our possession that the main objective of the German summer offensive was to outflank Moscow from the East and to strike at Moscow; while the object of the advance to the South was, apart from everything else, to divert our reserves as far as possible from Moscow and to weaken the Moscow front so as to facilitate the blow at Moscow.

"In short, the main objective of the German summer offensive was to surround Moscow and end the war this year."

In these words the German strategic plan was disclosed to the whole world while the German offensive was still in progress. It is possible that in time to come historians will more precisely elucidate certain details, but today the analysis of the German plan given by Marshal Stalin, remains as fresh and lu-

cid as ever and as such will it enter into the history of World War II.

Even in 1942, Hitler, the adventurist, tried to carry out his already defeated plan of crushing the U. S. S. R. with lightning-like rapidity. He counted on finishing off the mighty Soviet state in the course of one campaign.

Returning to the question of strategic objectives, it should be admitted that although there was a strongly adventuristic element about them even in the plan of 1941, in which the correlation of forces was incorrectly estimated, there still was at least a greater degree of clarity about them than in 1942. Three German groupings were at least given objectives that they were expected to attain in their offensive. In the plan of 1942 even this was lacking, for the simple reason that by then decisive victory over the Red Army had become even more impracticable and unattainable.

The principal objective of the German offensive of 1942 was, as in October-November 1941, Moscow. After his defeat in December 1941, however, Hitler could not indicate Moscow to the troops as the direct objective of their offensive. He therefore concocted the wild maneuvre of encircling Moscow, in the course of which the German troops were first to advance all the way to Kuibyshev, which is approximately 1000 kilometres from Moscow.

In our exposition we have already shown quite clearly that a strategic objective must be selected so as to promote the success of the troops' offensive. If the chosen objective does not assist the troops in making a successful advance, in overpowering enemy forces, in outstripping them by means of skilful maneuvres, of what earthly use is it? One can always find enticing targets on the map whose capture would undermine the enemy's base of resistance, but the whole point is to defeat the armed forces which defend these targets. The strategic objective is needed for concentrating the efforts of the troops, for making it as easy as possible for them to rout the enemy forces, for creating the most favourable conditions of fighting the battles in which the outcome of the war or the campaign is decided. The Hitlerite plan of 1942 contained many objectives, but it is useless to seek in it any indication of that objective which was required in accordance with the data of science. This was quite natural, for the German Command was already prey to uncertainty and lack of clarity as a result of their loss of the campaign of 1941.

In 1942 also the Germans were straining towards Moscow, and their final objective was more or less clear, but the German Command had only a vague idea as to how to attain this objective. Yet this question was the most vital one for the advancing troops. The strategic objective, as we know, must express the basic idea of a maneuvre, must determine the direction of the main blow. It was this, however, that was vague to the German Command. Its uncertainty prompted the Germans to repeat a mistake that has been made many times in the history of wars and has always led to final catastrophe: to seek an easier road, to try various possibilities on the chance that somewhere luck will hold.

In planning to outflank Moscow along the Volga, the Germans by no means excluded attempts to emerge much nearer to Moscow. In June 1942 they succeeded in breaking through at the junction between our Bryansk and Southwestern fronts on the direction of Stary Oskol-Voronezh. There can be no doubt that the German Command originally planned its main blow on precisely this direction. It obviously reckoned on forcing the Don at Voronezh and immediately emerging on the eastern bank of this river. The Germans thought to be in Borisoglebsk by 10 July. It is guite obvious that had their offensive on this direction been successful, the strategic situation would have presented a totally different picture than was actually the case. Their path to the Volga would have been made incomparably easier for the German troops. They would then have had the prospect of an offensive on the North to Tamboy and Arzamas. But if the German Command did have such schemes it should have set the troops a corresponding strategic objective. The German Command, however, did not set such an objective. Instead it set the troops a whole series of objectives, among which the designation of the main direction of the blow was completely lost.

While dreaming about the shortest direction of a blow against Moscow, the German Command was obviously uncertain of success, for it knew that the main forces of the Red Army were stationed on these directions. Hence its plans of making a long detour

around Moscow on the south and the east with the secret hope of diverting Soviet reserves from the Moscow front to the south and compelling the Soviet Command to scatter its forces over a vast area.

If the German Command was right about anything at all it was precisely in its fears that the German troops would not break through on the shortest directions to Moscow. After bitter fighting in the region of Voronezh the Germans had to drop their plan of breaking through on the eastern bank of the Don. With all the more energy did the German Command therefore extend its breakthrough to the south. Here, too, it cherished the hope that the retreating Red Army might virtually carry it all the way to Baku. All the more did it demonstrate its intention of concentrating on this direction and gave much publicity to this intention. It expected that Soviet forces would thus be diverted from the north and counted on again striking a sudden blow on the shortest direction to Moscow.

Thus the Germans simultaneously strained northward and southward. The German Command simultaneously pursued two strategic

objectives: Moscow and Baku.

"In November of last year the Germans counted on capturing Moscow by a frontal attack, on compelling the Red Army to capitulate and thus bringing the war in the East to a close. These were the illusions they sustained their soldiers with. As we know, however, these calculations of the Germans miscarried. Having burnt their fingers in their attempt at a frontal attack on Moscow last year, the Germans planned to capture Moscow this year by a flanking movement and to end the war in the East in that way. These are the illusions with which they are sustaining their duped soldiers now. As we know, these calculations of the Germans also proved unsound. Their attempt to chase two hares at once-oil and the encirclement of Moscowlanded the German fascist strategists in (From Marshal Stalin's speech difficulties" on 6 November, 1942).

In their offensive in the summer of 1942 the Germans set themselves decisive aims not only in respect to this particular campaign but in respect to the whole war in the East. After taking Moscow and Baku the German Command reckoned to deprive the Red Army of its principal sources of resistance, to cut it

off from the Urals and to rout it in a gigantic battle.

We already know that with modern wars being fought on such a large scale, troops may be given two and more strategic objectives simultaneously. But they must be set correctly, with a proper estimation of the correlation of forces. In the given case we have an example of an objective being set incorrectly.

The campaign of 1941 showed that the Germans were not strong enough to take Moscow, partly because they scattered their forces over a huge front. Now, in 1942, the German Command again made the capture of Moscow its objective, which in itself was beyond the powers of the German troops. But the adventuristic nature of this plan was still further increased by selecting Baku as the second strategic objective. The forces of the German army were thereby dispersed in two different directions. Instead of concentrating the efforts of the German army, the chosen objectives tended to scatter them.

However, the Germans did have a unified encirclement of Moscow by a flanking movement far into the rear-and in this plan Moscow was the principal strategic objective and Baku merely an auxiliary objective. Yes, but if the German Command really had deliberately planned such a maneuvre—phantastic enough in itself—the strategic objective should have expressed its idea. The objectives Moscow and Baku did not do this. This affected the rate of development of the operation, as a result of which the German troops were supposed to reach the Volga, for the German Command obviously allowed the possibility of achieving the set objectives directly—by the shortest direction to Moscow and by pursuing the retreating Soviet troops to Baku.

True, the German Command set its troops other objectives as well, and even indicated the dates by which they were to be attained. These, however, were not strategic objectives. They were merely partial, intermediate objectives. Their very abundance and dispersion clearly betrayed the absence of any firm basis to the German strategic plan. Bearing in mind the principal maneuvre of encircling Moscow, we find three possibilities clearly defined: advancing directly northward, rolling up the Soviet front; breaking through to the eastern bank of the Don in

the vicinity of Voronezh and then advancing North; and, finally, reaching the Volga and advancing along the western bank of the river to Kuibyshev.

In the middle of July a large German grouping consisting of the 6th and 4th tank armies reached the bend of the Don and advanced upon Stalingrad. The Germans were already concentrating their main forces on this direction. Did not this mean that Stalingrad was their strategic objective?

Beginning with this period Stalingrad came more and more to be the principal objective of the Germans. But we must not forget that the failure of their attempt to break through to the eastern bank of the Don became evident at this time. We must not forget that the German troops continued to press towards Baku and Tuapse.

The longer the campaign of 1942 continued, the more obvious it became that Stalingrad should have been the strategic objective of the German offensive. It should have been, but it was not. The strategic objectives of the Germans were Moscow and Baku—im-

practical, unattainable objectives. In the next section of this chapter we consider in detail how Stalingrad came to exert a greater and greater influence on the will of the German Command, compelling it to concentrate its efforts on this direction. In discussing the campaign of 1941, however, we have already shown that a strategic objective cannot be altered with impunity in the course of an offensive. If, having burnt their fingers in their attempts to reach Moscow and Baku by the shortest routes, the German Command made Stalingrad the principal objective of their offensive operations, they thereby admitted the failure of the original strategic plan. This led to very real consequences not only in respect to plans but in respect to battles as well. The initial effect of suddenness of action already worn off. Material and human forces had been expended on fruitless strategic directions. A slackening of the tempo of offensive, fraught with great danger, began to make itself apparent. The German Command was already powerless to correct the strategic situation that developed as a result of the erroneously chosen objectives: Moscow-Baku. But did the Hitlerite clique renounce these objectives in the further course of the offensive? No, for, as we have already said, a rational, scientific conduct of their operations did not satisfy them, for this would have entailed a protracted war. The Hitlerites therefore did not drop their attempts to break through to the eastern bank of the Don, continuing to press into the interior of the Caucasus. This could not but affect the conduct of the operations for the capture of Stalingrad. That is why it would be correct to say that even in the later stages of its offensive the German Command did not clearly designate Stalingrad as its strategic objective.

A certain analogy may be drawn with Ludendorf's offensive in March 1918, which was mentioned above. At that time Ludendorf, too, designated as his strategic objective the city of Amiens, the capture of which, under the conditions then obtaining, would have signified the operational conclusion of the breakthrough and the separation of the English from the French. The German offensive spread over three directions—the northwestern, the southwestern and the southern. A huge salient—the Amiens sack—was formed, at the margins of which the German troops were checked and where they thereby found themselves in a dangerous situation.

The operations of 1942 were executed on an incomparably greater scale. Only for purposes of comparison can we say that the Hitlerites did not designate Stalingrad as their strategic goal and that their offensive likewise spread all along the edges of a vast bulge without achieving any decisive result. The situation grew dangerous for the German troops.

Here, too, the vital defect in German strategy stands clearly revealed: the selection of impractical objectives that did not correspond to the human and material forces available.

In the campaign of 1942 the Germans simultaneously carried out several plans:

a breakthrough of the front, for which they had to reach the Volga and take Stalingrad; an advance upon the Caucasus and Baku in order to take the oil fields;

a deep flanking advance upon Moscow from the east with the purpose of capturing the capital of the U. S. S. R. and ending the war.

The Germans had a superiority of forces in the South. They won important tactical successes. Yet, despite all this, only the first plan could be practical. In order to ensure the following operations they first had to capture Stalingrad. Hitler, however, tried to carry out all three plans at once, designating Moscow as the main objective, Baku as the auxiliary objective, and considering Stalingrad as only an immediate target no different from many others. It is quite natural, therefore, that the

whole offensive fell through. Essentially the Hitlerite gamble of 1942 was a reproduction of the gamble of 1941. Without having sufficient forces to conquer so powerful a state as the U. S. S. R., the Hitlerite clique placed its stake not on main, constantly operating factors, but on chance and temporary factors. In 1942 the Hitlerites counted primarily on lightning-like rapidity of action, on the stunning effect of an offensive of tanks and aircraft, on undermining the morale and the strength of the Red Army's resistance, on the collapse of the Soviet State, on the paralysis of the economy and transport system of the U. S. S. R. It was because of this that Hitler set so many objectives, all of which his troops were to attain with fantastic rapidity. He thought that Russian cities would fall into the lap of the Germans like ripe nuts from a tree that has to be but slightly shaken. Scientific strategy did not suit Hitler, for in 1942 it showed even more clearly than in 1941 that war against the U.S.S.R. meant a series of difficult and prolonged campaigns. The Hitlerites had neither sufficient strength nor time for this

This strategy was adventuristic, but it would be absurd to close our eyes to the fact that the Hitlerites' plans were fraught with great danger for our country. After all, the enemy still had a superiority of forces in the South, a quantitative superiority of modern war materiel, the efficacy of which was exceptionally great. The South was of tremendous economic value to the Soviet Union. The Soviet people and the Soviet state were, however, capable of enduring the grim trials that beset the U. S. S. R. in 1942.

and they again rushed madly forward.

The Hitlerite strategy in 1942 staked everything on the weakness of the Soviet defence, and it miscalculated in regard to this most important question just as badly as it had in 1941. Thanks only to the strength of the resistance of the Soviet people and the Red Army were the weaknesses of the Hitlerites' foolhandy strategy disclosed. But this is not all. The strength of the Soviet defence

led to the checking of the German offensive and prevented the German army from taking the important objectives towards which it strained. But even under these conditions the breakthrough of the Germans on the Don and in the North Caucasus placed the Soviet Union in a highly dangerous position. Had the German troops been able to hold their lines through the winter of 1942—1943, they could have resumed offensive operations in their next campaigns and the loss of the Ukraine, the Donets Basin, the Don and the North Caucasus would have greatly weakened the might of the U.S.S.R. Our Stalinist strategy extracted the sting from the Hitlerite serpent. In place of a decisive victory, the Hitlerites were dealt a decisive defeat in the campaign of 1942.

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"Thus, the tactical successes of the German summer offensive were not consummated owing to the obvious unfeasibility of their strategical plans."

Had Marshal Stalin spoken these words now when the events of 1942 can be calmly analyzed, they would still retain their outstanding theoretical significance. But they were spoken at a time when the Germans had been most successful in their offensive. What colossal strength Stalin's wise, confident words conveyed at a time of such superhuman stress. They throbbed with the might of the indestructible Soviet state, the strength of Stalinist military science triumphing over the gambling of the Hitlerites.

The analysis Stalin made on 6 November, 1942, laid a firm foundation for strategy as a science in the new and highly complex conditions of modern warfare. We have already seen with what irregularity the science of strategy developed in our epoch, and how theories arose that either denied it openly or in essence. This is explained, of course, not by the fact that the role of strategy was diminished or reduced to nought. On the contrary, it increased. It is explained by the extreme increase in the scope and the variety of military operations owing to the colossal development of war materiel. Tactics engrossed the attention and the minds of the generals. And some of them failed to see the trees for the forest.

We shall still have to consider the relationship between strategy and tactics in this chapter. Let us stop now on one very important factor. In his analysis Stalin stressed the significance of the strategic plan and objectives. This restores to strategy all its power and significance in modern warfare as well. Tactics still takes a subordinate position in relation to strategy.

This does not detract from the value of tactics. On the contrary, its significance is enhanced in comparison with the role hitherto allotted to it. During the German offensive of 1942 military operations assumed a very wide scope. The Germans pushed hundreds of kilometres forward in the lower reaches of the Don and in the North Caucasus. The Germans' successes were substantial, but Stalin defined them as tactical successes, precisely because they were not consummated strategically.

Strategic consummation of tactical operations is all the more important today when the sphere of tactics has become enlarged and grown more various. The more complex tactical operations grow, the greater their scope, the more important is it that they be unified and directed towards a definite end. Strategy brings a planned element into the course of military operations carried out over a vast expanse of territory. It indicates the final objectives which the troops must attain in order to be victorious.

As an example, let us take the capture of Rostov by the Germans. This was indisputably one of their greatest successes. The tremendous strategic importance of Rostov as an important junction of communications and as the gateway from the European part of the U.S.S.R. to the Caucasus is common knowledge. Nevertheless, by their capture of Rostov the Germans achieved an important tactical, but not a strategic success. In other words, in the German offensive Rostov was a tactical and not a strategic objective. The importance of this problem for our subject is obvious. The only sound, scientific basis for its solution is the analysis of the whole problem as presented by Marshal Stalin.

What is the distinction between a strategic and a tactical objective?

Marshal Stalin saw through the German strategic plan for 1942. It aimed at ending the war that same year. The main objective was to take Moscow by a flanking movement from the southeast. The auxiliary objective was to take Baku and thereby deprive the

Soviet Union of its oil districts and divert Soviet reserves from the Moscow front.

These are strategic objectives. The salient characteristic of such objectives is decisiveness. The Germans counted on winning the war against the U.S.S.R. once they achieved these objectives. Only Hitlerite strategy which staked everything on a gamble, could put the problem in such a way. In modern warfare it is impossible to win a conclusive victory with a single blow. The German plan for winning the war against the U.S.S.R. in a single campaign was a pure gambling venture. From a scientific point of view, the conception of a "decisive" objective in an operation is applicable only to a single campaign or to two or three consecutive campaigns. From this point of view, Stalingrad might be taken as the Germans' decisive objective in the 1942 campaign. It must be understood that we are stating this conditionally, since the whole war of the Hitlerites against the U. S. S. R. was a gamble and it is therefore impossible to speak of any real, decisive objectives whatever in their offensive.

The capture of Rostov by the Germans was of major but not decisive significance, not only from the point of view of the whole war but from that of the 1942 campaign. Rostov was a tactical objective in the German offensive. Here the objection may be raised, however, that the taking of Rostov was more important than the taking of some minor point. It seems expedient to establish an intermediate category, lying between the strategic and the tactical objective, which we shall term the operational objective.

Offensives in modern warfare are waged on such a broad scale that they are broken up into a number of operations carried out by separate armies (fronts). Each operation is carried out according to a definite plan. What are the objectives of these separate operations?

With proper direction, such operations form links of a single strategic plan. All of them, taken as a whole, and each of them, taken separately, aim to achieve a strategic objective or objectives. If the offensive develops successfully, the strategic objective is directly achieved in the principal or final operation. But as we have already had occasion to remark, all the auxiliary operations must also be subordinated to the achievement of the main strategic objective.

Every operation, moreover, has its immediate objectives, arising out of the general strategic plan. These should be called tactical objectives. Every operation thus pursues a strategic objective as the decisive aim of all the offensive operations and also immediate objectives, that is, tactical objectives. It would not be expedient to introduce any other distinction of the objectives involved in an operation since it is important for the officer in command of the operation to know what objective is set by the supreme command and what immediate objectives, issuing from that, are set for each given operation.

Thanks to the motorisation of modern army formations, tactical actions have become so comprehensive that it is impossible to measure them in former scales. Tanks and aircraft are able to transfer the scene of battle into the depths of the enemy line

within a few hours.

The combination of engagements and maneuvres which the Germans employed in taking Rostov form what we may call the "Rostov operation." Rostov, however, was an immediate, tactical objective in their plans which called for other strategic objectives. The question of whether one point is a tactical or a strategic objective depends on the plan of the supreme command.

But, we may be asked, are there really no objective grounds for distinguishing between strategic and tactical objectives? Does such a distinction depend only on the plan of the supreme command? Such objective grounds most certainly exist and they must be taken into consideration in drawing up a strategic plan. It must be borne in mind, however, that in war it is important not only to seize geographical points, important as they may be, but also defeat the enemy's forces.

Why was Moscow the Germans' main objective in 1942? Because its capture involved the decisive defeat of the Red Army and the end of the war. Since the Germans despaired of taking Moscow by a frontal attack, they decided to resort to a ruse—to take Moscow by a flanking movement and at the same time to divert Soviet reserves from the centre by an offensive against Baku.

From this point of view, all their other objectives were immediate, tactical objectives. And this was really the case since the capture of Rostov, for instance, had no decisive

significance in the campaign of 1942. It was merely one phase of the German offensive on Baku.

It may be claimed that in the long run it is not important what objectives were considered as strategic by the German command itself since after all they were unreal and unattainable objectives. It would be a mistake, however, to assume that the German strategic plan was incorrect and unreal and that it played no role in the course of the German offensive. It played a negative role. It not only failed to provide a correct orientation and to coordinate the tactical actions of the German troops but it led to disaster.

Thus a paradoxical situation arose—the Germans achieved tactical gains while the strategic situation of their troops became increasingly dangerous. Tactical gains, to be of any value, must lead to strategic successes. In the German offensive, however, there were no such successes nor could there have been in view of the infeasibility of the plan as a whole. What could possibly have resulted under such conditions except the dispersal and scattering of the German forces in different directions and their finding themselves in a precarious situation? The German offensive spread out chaotically over a tremendous area, its movements lacking any definite course.

It is clear from the foregoing that the strategic objectives set by the Germans did possess significance: setting unattainable objectives for their troops, the German command doomed the offensive to failure.

Having drawn up vast, fantastic plans, the German Command erred in its estimation of the specific features of the theatre of operations and of the operations themselves. Although the German Command realized the significance of Stalingrad, it underestimated this significance. At first Stalingrad figured as one of the immediate objectives in the Germans' strategic plan. The German Command began by straining every effort to break through to the eastern bank of the Don, later turning its attention southward. Only in the final phase did the main German grouping launch its offensive directly against Stalingrad.

Was this not an opportunity for German strategy to rectify its mistakes at once? Did not the capture of Stalingrad achieve the desired strategic effect? If the operation had been carried out properly, the taking of Stalingrad could have meant the culmination of the break-through and have ensured the further development of offensive activities in the north and the south.

This question will be considered further on where we shall stop to analyse the operations of the German grouping in the Stalingrad offensive.

In conclusion we may say that Hitler's erroneous strategic plan, in which Moscow and Baku were the main objectives, undermined the tactical gains made by the German troops and placed them in a perilous situation.

In the first place, by dispersing their efforts in various directions the Germans had perforce to retard the speed of their offensive, and when they came up against the powerful Soviet defence they were unable to take Stalingrad.

In the second place, correct strategy was

ruled out as far as the German adventurers were concerned. They were striving to bring the war against the U. S. S. R. to an end in 1942, i. e. to accomplish what they had failed to do in 1941. The switching over to a protracted war, involving a whole series of campaigns, doomed Germany to defeat in the long run.

It was no accident, therefore, that the Germans failed to turn their tactical gains into strategic ones. The gap between tactical and strategic success was inevitable in the gambling venture on which the Germans had staked their hopes.

This placed the German troops in a precarious situation in which defeat became a possibility. Thanks to the wise strategy pursued by Marshal Stalin, this possibility became a reality. The temporary tactical gains of the German troops proved their own undoing.

(To be continued.)



Greeting returning victors at the Arc de Triomphe in Leningrad

THE SCIENCE OF SPEECH AND THOUGHT VERSUS THE FASCIST "RACE THEORY"

By Professor S. Dobrogayev
Head of the Laboratory of the Physiology of Speech, Academy
of Sciences of the U. S. S. R.

THE VIEWS held by Soviet scientists on human speech and the related function of thought are of great scientific interest and are now acquiring special importance in connection with the exposure of the fascist race "theories." Man's functions of speech and thought are the most sensitive and graphic indices of the characteristic features of cultural development in human communities among individuals. In discussing attempts to divide mankind into higher and lower races it is interesting and important to examine the characteristic features of human speech and thought, the way in which the human brain performs these functions, and their origin and development in the life of every individual as well as in that of a socially organized body.

The clearest results of a special study of speech and thought on a strictly scientific basis were obtained in the work of Ivan P. Pavlov, Nikolai Y. Marr and the researches of the Laboratory of the Physiology of Speech.

Elaborating the conception of speech as a higher conditioned-reflex function of the brain inherent only to man, Pavlov said: "The spoken word is for man as much a real conditioned excitor as all the others that he shares in common with animals, but simultaneously it is also much more inclusive than any other and not to be compared either quantitatively or qualitatively with the conditioned excitors affecting animals. Thanks to all the previous life of an adult man, the

word is associated with all the external and internal excitors reaching the cerebral hemispheres, signalizes them all, replaces them all, and is therefore able to evoke all those actions and reactions of the organism which those excitors do."

As we see, Pavlov made a quantitative and qualitative distinction between the higher nervous activity of man and that of animals, and found that the signalling value of words is determined only by the external and internal excitors that reach the human brain, and not by any innate differences in brain structure between some one racial grouping or another.

Pavlov maintained that by means of a neurophysical process, identical for all individuals, human beings invest words with some signalling value or another due to the many diverse excitors affecting the nerve elements of the brain. In Pavlov's opinion words owe their complex meaning and various connotations to the specific conditions of life of those concerned and not to any peculiarities in the structure of the central nervous system in people belonging to different races.

In other works touching upon the problem of speech in relation to its content, Pavlov affirmed even more definitely, firstly that among all the manifestations of higher nervous activities in man, speech possesses a specially important indicatory value, and, secondly, that speech signalizing reflexes are phenomena common to all men and are thought processes peculiar to man alone.

"I picture the higher nervous activity as follows," said Pavlov. "In the higher animals, man included, the first site of the organism's complicated inter-relationships with its environment is the subcortex nearest to the cerebral hemispheres with its highly complex unconditioned reflexes... The cerebral hemospheres, excluding the frontal lobes, form the second site. Here, with the aid of conditioned connections, there arises a new principle of activity: the signalization of a few unconditioned external agents by innumerable other agents which are at the same time constantly undergoing analysis and synthesis, thereby permitting greater orientation in the same environment... This constitutes the only signalling system in the animal organism and the first one in man. In man there is another system of signalling, which, we may assume, is located especially in the frontal lobes. which are much more highly developed in him than in animals. This is the signalling done by the first system by means of speech."1

"Speech," Pavlov goes on to explain in another paper, "is primarily a kinesthetic excitation proceeding to the cortex from the vocal organs. It is the secondary signal transmitted by the first signals. It represents an abstraction and permits generalization. This is what constitutes our intrinsically human and higher process of thinking which first gives rise to a universal empirical knowledge and finally gives rise to science, that is, to man's highest means of orientation in the world around him... It is quite probable that the frontal lobes are the organ of this supplementary, purely human process of thinking, to which, however, one is inclined to believe that exactly the same general laws of the higher nervous activity should apply."2

In the above statements Pavlov looks upon the functions of speech and human thought as special, characteristic supplementary functions of the brain that are inherent only to man. He attaches special anatomic and physiological significance to this reflex activity of the frontal lobes of the human brain. For us it is important to note that in these statements Pavlov recognizes speech and the related function of thought as a supplementary function which is identical in all people and the existence of which is the primary feature distinguishing the higher nervous activity of the individual from the system of signalizing reflexes that is to be observed in animals. In Pavlov's opinion man is the most highly organized of all animals, being endowed with the power of speech and possessing his own, intrinsic faculty of thought that is related to speech.

Further Ivan Pavlov stresses the universality of this special human faculty of higher thought that is related to speech. In Pavlov's opinion this function of speech and thought distinguishes all people equally from all animals.

The general laws governing higher nervous activity in regard to thought and speech should remain exactly the same for all people. The action of these laws is manifested uniformly by all people in the processes of evolving universal empirical knowledge and of developing scientific knowledge. Pavlov persistently emphasizes the fact that special peculiarities of speech and the related function of thought are wholly determined by the environment in which the given person must orientate himself, and also by the special properties of the higher function of orientation which he develops by living in a given environment. Pavlov says nothing about any innate differences in this higher nervous activity among various peoples. None of his hypotheses contain even the faintest suggestion of this. What is more, he even allows for a certain similarity in the neurophysiological inter-relationship of animals and people with their environment, which may be observed in the basic unconditioned reflex activity of the brain.

Thus, in all his scientific conceptions of the essence of speech and thought reflex activity, Pavlov finds absolutely nothing to justify any hypothesis concerning the existence of higher and lower races. A greater or lesser development of speech and thinking habits depends on the living conditions of the given person.

Nikolai Marr, talented Soviet philologist, has elaborated the study of speech as a linguistic system created in the course of the cultural life of human communities. Marr's scientific conceptions likewise clearly revealed how absolutely unfounded the fascist race "theories" are.

¹ Test of a Physiological Conception of the Symptomatology of Hysteria, Academy of Sciences Press, Leningrad, 1939, pp. 30—37.

² Latest Studies of the Physiology and Pathology, of the Higher Nervous Activity, Issue No. 1, Leningrad, Academy of Sciences Press, 1933, pp. 23—27.

Firstly we think it essential to note that in affirming his new theory of linguistics on the basis of a strict study and careful analysis of all the concrete, operative elements in the origin and development of language systems, Nikolai Marr never looked upon man's speech and thought activity as subjectively psychological or as psycho-physiological. On the contrary, he repeatedly and quite clearly showed a tendency to interpret the work of the human brain, of which speech and thought are two of the functions, in the light of Ivan Pavlov's teachings. True, Nikolai Marr employs psychological terms in his works (conception, abstraction, judgement, volitional impulses, etc.), but all these terms are imbued with a content taken from the actual life of the language and considered as social phenomena. They can in no wise be classified with Kant's categories of mind, feeling and will.

In order to determine the principal features of Nikolai Marr's researches, let us consider certain passages in his article The Origin of Language. In this work Marr asserts that "on the one hand, the genesis and development of speech is inseverably bound up with the genesis and development of society, the collective creator of human language... On the other hand that same speech, oral speech, is technically and genetically linked with physiology, not only in regard to manner of pronunciation (phonetics), or the oral realization of the need for speech, but, and even to a greater extent, in regard to the system of employing the means of speech production, which in this instance are the tongue and the adjacent organs, and in regard to reaction to the surrounding world, first to the external world and then also to the personal, inner world. In both cases our perceptions sum up the results of conditioned reflexes as experienced in the past and as being experienced in the present, i. e., so-called psychological perceptions. In our studies we too are naturally affected, whether we like it or not, by all these factors, and deliberately take them into account."1

The first and most important factor on which the genesis and development of a system of speech depends is, in Marr's opinion, the community, which he calls "the collective creator of human language." Language in all its manifold manifestations is not

¹ N. Y. Marr. Selected Works. Vol. II. The Origin of Language, State Publishing House, 1936, p. 187.

created by any one individual but by a whole body of men. The distinctive features of the lingual system of any given people are wholly dependent upon its cultural development, which passes through definite, similar stages among all peoples. Placing this social-cultural factor at the basis of his scientific conceptions of the existence of systems of speech and thought, Nikolai Marr emphasizes in all his works that there are human communities that stand on different levels of development in respect to culture and speech, but that all peoples, all human races, are equally capable of the greatest cultural progress and the greatest progress in the related sphere of lingual creation. Therefore, from Marr's point of view, there can be no question of any innately higher or lower races.

The second factor in the genesis and development of speech Marr considers to be the physiological work performed by the tongue in the process of sound pronunciation—phonetics. As far as this "technical means of speech production" goes, people cannot be divided into innately different groups.

"The tongue, with the adjacent organs" is an anatomical and physiological factor that cannot help functioning identically in all people. Marr usually links the "oral realization of language requirements" with the development of the community as the "collective creator of language." Nowhere does he regard this important anatomic and physiological factor as an innate gift, as something highly organized in some peoples and poorly organized in others.

In his scientific theory of the concrete elements of lingual intercourse among men, Marr includes his conception of constant reflex reaction to the environment, which is a special physiological factor. In harmony with Pavlov's ideas about speech reflexes, Marr looks upon so-called psychological perception as a higher conditioned reflex activity which is identical for all people. He considers the essence of psychological work in the development of human speech thought to be "reaction to the surrounding world, first to the external world and then also to the personal, inner world. In both cases our perception depends on the results of conditioned reflexes as experienced in the past and as being experienced in the present".

Marr links up this conditioned reflex acti-

vity of the human brain, which bears upon the genesis and development of speech content, with the origin and development of the community which, among all peoples, passes through the same definite stages in the process of cultural development. Thus, Marr's physiological views regarding conditioned reflexes likewise give no ground for recognizing any race "theory" whatsoever.

The laboratory of the Physiology of Speech in the Academy of Sciences of the U.S.S.R. is continuing the work done by Pavlov and Marr, elaborating the problem of speech and thought. The members of this laboratory come to the conclusion that the anatomic structure and functional activity of man's body, especially of his brain in the process of speech and thought, are wholly determined by the social relationships affecting every individual all his life long. In the present article we shall analyze the typical features of the organization of the human nervous system, considered as effecting, by means of reflex activity, human intercourse in the form of speech and thought, these latter being considered from the standpoint of their origin and development and their various manifestations.

It has been established with regard to the central nervous system in man that all the countless neuron structures which identically distinguish the brain of any human being from that of the highest animals represent the socially determined anatomic and physiologic superstructure which originated uniformly in primeval man in the process of his development from extinct anthropoid apes. In the course of the development of each of the man-like members of the primeval communities, the nervous system of primeval man underwent a change as compared with the nervous system of the highest anthropoid apes. This change affected all the parts of the cerebral hemispheres and the subcortical segments. These changes took place uniformly in all people and in all the structural elements of their nervous system: a) in the number of neuron elements (the most highly developed modern apes have approximately one billion neurons while man has more than ten billion); b) in the comparatively wide ramifications of each individual neuron in the human brain; c) in the greatly increased number (as compared with the higher animals) of coordinating ganglions in the cerebral hemispheres, and throughout the whole of the central nervous system in general; d) in the additional innervation of human muscles by the peripheral nervous system in comparison with the innervation of animal organisms, etc.

This change in the structure of the human nervous system took place uniformly in all people in the process of the formation of the most complex conditioned-reflex behaviour patterns. The latter arose in connection with the manifold—in regard to content and form interrelations of the members of human communities in their working activities, in the organization of their social life, in collective thinking, in their oral intercourse which is linked with all the foregoing. This genetic approach to the study of man as a participant in the creation of human culture clearly exposes the utter fallaciousness of the fascist "theory" of the innate superiority of one race over another. Let us consider in greater detail the conditions of the genesis and development of systems of speech and thought in primitive man.

In building up their conceptions of the conditions leading to the development of speech and thought, students of the physiology of speech took as their point of departure the fact that the life of a human community as a whole and of each of its members individually is made up of interaction with the environment in the broadest sense of this term. The concept of environment includes the factors relating to the organization of the working activities of the community, the social and production relations that have arisen among the members of the given community, habits of collective thought, the system of vocal and kinetic speech (sign language) etc. One of the most vital factors in the development of social life is the inevitable presence in every social body of a series of generations which, by means of the reflex activities of their brains—functioning in accordance with uniform laws—successively put into effect all the endless variety of complex manifestations of social life.

From the point of view of the conditionedreflex activity of the brain, the process by which this realization takes place may be interpreted as follows. The working, social and general cultural environment of man represents a source of countless excitations for the brain of every member of a commu-

nity. Every stimulus of any significance in the life of a community is unquestionably received by the human brain, treated by it and then made manifest and concrete in one or another set of more or less complex responsive reactions.

One of the most characteristic functions of the human nervous system, an understanding of which is important for a strictly physiological interpretation of the problem of speech, the preservation of life experiences in the coordinating structures of the human brain. This is fostered by every man as a member of a community in the complex processes of his higher nervous activity. In research work on the physiology of speech, all people are studied as members of a community, because it is precisely human communities and the processes of the development of working and social activities by one generation after another, that establish all the endless variety of concrete manifestations of a cultural development that is uniformly inherent to all people. Firmly established cultural achievements act as constant reflex stimuli for every member of the given community, providing that corresponding cultural habits have been fostered.

Communities of people are the keepers of endlessly manifold manifestations of cultural experience that are passed down from one generation to another. In the process of this transmission the members of each generation interact upon each other and upon the cultural milieu in which they inculcate the habits of their own, personal behaviour. As a member of a socially organized body, every person inculcates and preserves in the coordinating structures of his brain definite socially significant behaviour habits. These habits are formed by the vital stimuli in the environment. This is the essence of the constantly activizing and educating influence of his environment upon man.

In his turn, however, every individual cannot but influence the environment, the manifestations of life. These influences are the living human force which goes to make up the life of every community. Man constantly accumulates experience (an active, ever changing conditioned-reflex activity of his brain), and in the process of influencing the environment, he contributes to the development of the working and social activities of the community, to the establishment of ever new interrelations between the environment and the members of the given human community.

Such is the essence of the functional activity of the human brain, which must be taken into account as an anatomical and physiological component in building up a theory of the language systems of communities and of the lingual intercourse of each

individual person.

The origin and development of the culture of every human society must needs include in itself the origin and development of a corresponding system of collective thinking and a related system of language. They are unquestionably the most vital components of every manifestation of cultural development. In the process of its gradual development from extinct anthropoid apes, man's organism assumed definite anatomical and physiological structures which are common to all people. This development took place in the process of the realization of the human activity of the nervous munity, and, consequently, of each of its members individually. Every individual living in a community (and otherwise he cannot exist) is inevitably subjected throughout his life to the influence of a system of oral speech signals and symbols. In this manner there is formed and preserved in the structures of each individual's brain a system of speech intercourse that is identical with the system of language and thinking obtaining in his native community. These generalized customs that are preserved in the brain are given concrete form in the acts of the individual's daily speech behaviour.

None of the above-mentioned scientific conceptions give any grounds for dividing races into higher and lower. Different communities of people may have attained different levels of cultural development, but this is a temporary, transcient phenomenon. With development of working and social activities as one generation follows another, the cultural level of the members of the given community inevitably rises, no matter to what race it belongs.

ARCHAEOLOGICAL STUDIES ON THE ORIGIN OF THE EASTERN SLAVS

By Professor P. Tretyakov

R USSIAN archaeologists have always attached tremendous importance to the study of Slavonic antiquity, and this subject occupied a prominent place in the works of such well-known pre-revolutionary archaeologists as D. Y. Samokvasov, V. B. Antonovich, V. V. Chwojka, V. Z. Zavitnevich, V. I. Sizov, and A. A. Spitsyn. The past of the Slavonic peoples has ever been the subject of the liveliest discussion at congresses of archaeologists. Not only large museums such as the Moscow Museum of History, the Museum of the Archaeological Institute in St. Petersburg and the Historical Museum in Kiev, but also small ones located in the provinces boast rich collections of Slavonic antiquities.

At the same time the study of Slavonic history was not limited to the narrow subject archaeology alone. Russian scientists posed and tried to solve many important problems dealing with the history of the Slavs. The works of V. V. Chwojka, for instance, treated extensively of the ethnogeny of the Slavs in the territory of the middle Dnieper. Problems of considerable historical importance were presented in the works of D. Y. Samokvasov. Archaeological material contained in his report on the Historical Importance of Ancient Russian Settlements, aroused much interest among Russian historians in its time. Of particular value were the works of A. A. Spitsyn, which have been extensively commented on in historical literature. The historical geography of the Eastern Slavs, the location of their ancient settlements, their relations with Byzantium, the Orient and the Baltic countries, their trade routes, and the Norman problem-such is the far from complete list of problems which have long interested Russian archaeologists.

Before the revolution, however, the study of Slavonic antiquity rarely left the bounds of Ancient Russ. Notwithstanding the protests voiced by many Russian archaeologists against the theories that prevailed in the nineteenth and the beginning of the twentieth centuries concerning the origin and fate of the ancient Eastern Slavs, the science of archaeology was unable to overthrow the Indo-European ethnogenic theory then widespread. In spite of the opinion shared by a number of archaeologists, Slavs inhabiting the East European plateau were regarded as newcomers, having no ties whatever with the preceding life of the country. The prevailing opinion was that Slavonic tribes had appeared on the territory of the middle Dnieper only in the second half of the first millennium of our era. It was also held that the ethnic map of the Eastern Slavs had actually come into being not earlier than the end of the eighth or the beginning of the ninth century. Hence the conclusion that the rich historical and cultural heritage found in the territory along the northern part of the Black Sea and the Dnieper, had no direct relation to the Eastern Slavs. As a result, archaeological relics dating back to the beginning of our era and found along the middle Dnieper, were regarded as "Gothic", in spite of contrary assertions made by V. V. Chwojka and other Russian and Czech archaeologists. In the northern areas, ancient memorials dating back to a time preceding Slavonic monuments of the ninth and tenth centuries were regarded as either of Finnish or Lithuanian origin, and were considered to be of no interest whatever.

Accordingly the history of Eastern Slavonic tribes prior to the formation of the Kiev State, was almost completely unexplored by archaeologists. This is one of the reasons why for so long a time no answer had been given to such cardinal problems of ancient Russian history as the role of hunting and agriculture in the economic life of Slavonic tribes, the appearance of towns, the clan, tribal and communal orders, the development of Slavonic culture as a whole and many others.

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Soviet archaeology, however, has made a great step forward in the study of Slavonic history. Numerous new archaeological data have been obtained and a mass of very important material concerning ancient Slav culture and history has been discovered and studied. Many problems concerning the history and culture of the Eastern Slavs, which baffled former scholars have been approached from different angle and elucidated. Soviet archaeology has considerably extended the bounds of Slavonic study and has, so to speak, for the first time in the history of science lifted the veil from an extensive and important period in the history of the Eastern Slavs, a period prior to the formation of the Kiev State.

These achievements in the field of Archaeology were to a considerable degree due to the works of that prominent Soviet scientist, Academician N. Marr, who was not only the founder of a new teaching with regard to the origin of language, but also the originator of Soviet archaeology and history of material culture. Academician Marr's historical and linguistic works, in which he made wide use of archaeological data, are of decisive importance when dealing with problems of the ancient history of contemporary peoples and the process of ethnogeny. He overthrew the long prevailing theory of the origin and the ancient history of European peoples, a theory which was based on the so-called Indo-European theory—the nurseling German philosophy, history and linguistics of the beginning of the nineteenth century. In particular, Marr proved the absolute bankruptcy of the Indo-European conception of Slavonic ethnogeny which regarded the history of Slavonic tribes and peoples as a process of dismemberment of what was once an allegedly single tribe, as a process of growing estrangement of the different parts of this single tribe. This theory also assigned the Slavs a subordinate role in European history.

Disproving the pseudo-theory which held that the primordial domicile of the Slavs was located somewhere in the southern part of Baltics among the Germans, peoples and the Finns, Marr proved that the ethnogeny of the Slavs was a process of growing and strengthening consolidation of at one time separate tribes, which had, nevertheless, been bound by century-old historical ties. Academician Marr also proved that the strong ties binding the Slavs with the ancient Black Sea territory and the Dnieper were ties of a genetic nature and that in the formation of the Slav peoples "the actual prehistoric population should be regarded not as a source of influence, but as a creative material force of formation" (N. Y. Marr, Selected Works, vol. V, Leningrad, 1935, p. 306).

The works of Academician N. Y. Marr opened up broad vistas to archaeology, which, more than any other branch of historical science, had always pointed to the inconsistency between the Indo-European theory and the factual data. New archaeological data were studied and new territories explored, while old materials were revised. A tremendous number of memorials whose origin had until then been undetermined, took their place among East Slavonic antiquities. And it became absolutely clear that the science of archaeology not only confirms the ethnogenic scheme outlined by Academician Marr, but makes it considerably more concrete, and shows promise of obtaining a broad, detailed and complete picture with regard to the origin and the ancient territory of Eastern Slavic tribes. It was also found that there exists an inexhaustible quantity of archaeological data concerning the life of Eastern Slavs both on the eve of the formation of ancient Russia as a state, and through a period of several centuries preceding this. It peared that archaeological memorials of Eastern Slavs can be traced not only to the eleventh and thirteenth centuries, as had been held previously, but also to the eighth and even to the fifth centuries.

A symposium of archaeological researches entitled the Ethnogeny of Eastern Slavs (World Institute of Archaeology of the U.S.S.R., No. 6) came out in 1941 in beleaguered Leningrad. It summarized the results of many years of work on the part of Soviet archaeologists on the subject of the ancient history of the Slavs. Some researches dealing with

this subject were also published in periodicals.

The problem of the ethnogeny of the Slavs takes us, first and foremost, to the Ukraine, to the area of the Middle Dnieper, where V. V. Chwojko and D. Y. Samokvasov conducted their work, and where Soviet archaeologists have made many very important discoveries.

Studies of Tripolye and the Bronze Age carried out on the territory of the Ukrainian S. S. R., have confirmed the previous statement that the territory along the middle course of the Dnieper and the vast spaces between the Dnieper and the Danube were regions of ancient East European agriculture. Unless this is taken into account, there can be no understanding of the numerous phenomena in the subsequent historical life of Eastern Europe, and, in particular, the origin of the Slavs. This does not mean, however, that we should go back to the opinion held by V. V. Chwojko, who connected the Tripolye tribes with the Slavs and thus considered that the Slavs had their domicile on the Dnieper as far back as the Stone Age. There is a large gap between the tribes of Tripolye and the Slavs. They are separated by several stages of ethnic development. But it is quite obvious that the ancient agricultural tribes of Eastern Europe were one of the sources from which the Slavs stemmed.

Numerous data were obtained in the course of archaeological excavations carried out on the Dnieper Dam and the further exploration of the right bank of the Dnieper. They testified to the existence of genetic ties between the agricultural tribes of the Scythian period and the local tribes of the Bronze age. Thus, the agricultural Scythian tribes evidently represent one of the most important stages in the autochthonic ethnogenetic process, when a culture of a considerably greater homogeneity was being formed on the vast spaces of the periphery of the Ancient Black Sea territory, and when, for the first time, marked ties were being established between the middle Dnieper and the more Northern territories. As a result of the work of Soviet archaeologists, much more light has been thrown on the Scythian agricultural tribes. In particular, an extensive study has lately been made of territories that were once inhabited by the Scythians and of what remains of Scythian mud-hut dwellings.

At the beginning of our era the so-called culture of "burial fields" was widespread in the area of the middle Dnieper and the Northern Carpathians. These were for a long time considered to be of Slavic origin by certain Russian, Ukrainian, Czech and Polish archaeologists. Research work carried on by Soviet and foreign archaeologists during the last few years have confirmed the correctness of this viewpoint. Evidently, at the threshold of our era, and as a result of both internal social-economic processes and the shifting of different tribes in the Black Sea Area and Central Europe which had begun at that time, an active cultural and ethnic consolidation had further proceeded among the different tribes in the vast area from the Dnieper to the upper reaches of the Danube, a consolidation which embraced the descendants of Scythian agricultural tribes, the tribes of the Vistula basin, and probably some of the Dacian tribes from the Carpathians. This body of ancient Slavic tribes had been in existence for several centuries and is genetically linked with the Slavic tribes of the end of the first and the beginning of the second millennium of our era (M. A. Tikhonova, Culture of the Western Regions of the Ukraine in the First Centuries of our Era. World Institute of Archaeology of the U.S.S.R., No. 6, 1941, P. N. Tretyakov, The Northern East Slavonic Tribes. Ibid.).

There is now no longer any doubt about the ties that existed between the tribes of the "burial fields" in the middle Dnieper and the Scythian agricultural tribes. The earliest "fields" discovered by Soviet archaeologists show that the people to whom they belonged continued to have an almost completely Scythian culture. Particularly striking in this connection is the material provided by the "field" which was recently discovered at Korchevaty, near Kiev. Here, alongside of vessels characteristic of the early "burial fields," real Scythian ceramics have been found. Only in the beginning of our era, under the influence of the provincial-Roman culture, the tribes of the "fields" changed considerably, and continued to exist in their new form up to the fifth-sixth centuries and, in some western regions, even longer. "Fields" of the Roman era have been discovered and explored during the last twenty years in several places of the Ukraine (N. Smolichev, Archaeological Excavations in the Area of Zlatopol, 1926, Brief Information for the Year 1926, Kiev, 1927). Several works dealing with settlements dating to this period have also been published. The remains of two mud-huts connected by a passage were discovered near Privolny, around Dniepropetrovsk. These dwellings are related both to the more ancient Scythian mud-huts and to the dwellings of the Slavs of the end of the first millennium of our era.

All this archaeological material provides serious grounds for regarding the agricultural tribes of Scythian times as the most important unit from which stemmed the Dnieper Slavs. This is confirmed by various other factual data.

Ancestors of the Eastern Slavs were found not only in the area of the middle Dnieper, but to the north as well. Byelorussian archaeologists have for a number of years been engaged in a study of previously almost unknown ancient settlements of the upper Dnieper. Hundreds of ancient settlements were discovered along the Dnieper, Pripyat, Berezina, Sozh and other rivers of the Upper Dnieper basin, embracing a period from the middle of the first millennium before our era and continuing through to the first and the second millenniums of our era. Similar settlements have been explored in the basin of the River Desna. These likewise give an extremely convincing picture of the uninterrupted development of local culture (V. P. Levenok, Archaeological Works of the Trubchevsky Museum, KSKH, 1941; P. N. Tretyakov, Northern East Slavonic Tribes. World Institute of Archaeology of the U.S.S.R., No. 6, 1941, pp. 13-16). It has also been found that even among the early settlements it is possible to distinguish an extensive group bearing traces of ties with the Scythian Dnieper settlements, and in later time close ties and common features with the tribes of the "burial fields" (P. N. Tretyakov, Ibid., pp. 11—12).

At the same time, considerable differences have been observed between the cultures of the upper Dnieper tribes and those of the Southeastern Baltics and the Volga area. These have been studied extensively in the course of recent years by Soviet archaeologists and archaeologists of the new Soviet Baltic Republics. Thus, Soviet archaeology has put forward and is proving the thesis that the basic territory of Slavic ethnogeny in Eastern

Europe probably includes in its bounds not only the middle but also the upper Dnieper area.

Soviet archaeologists have been attaching considerable importance to the problem of Antae and their culture. This is only natural, since the writings of ancient authors with regard to Antae represent the first indisputable historical information concerning the presence of Slavs on the East European plain. The Antae era signifies the entrance of the Slavs into the European political arena. The old archaeology, however, knew almost nothing about the Antae and their culture. A. A. Spitsyn alone made timid attempts to determine what relics belonged to the Antae. He limited his researches, however, to only a few groups of objects.

The problem of identifying Antae antiquities is extremely difficult indeed. The middle of the first millennium of our era was marked by the settlement of large masses of barbarians in areas around the Black Sea and the Carpathians. Goths, Huns, Avars, and Bulgarian tribes-all of them left traces of their sojourn in the area around the Black Sea. Archaeology, however, in adopting new methods of research, is gradually clearing up this complex picture and is already on the way to solving the problem (B. A. Rybakov, The Early Culture of the Eastern Slavs, Nos. 11-12, 1943; B. A. Rybakov, The Antae and the Kiev Russ, VDI, I, 1939). The culture of the Antae is no longer a riddle. Archaeological field work carried out in the Ukraine during the past few years to study Slavonic monuments of the first millennium of our era. has thrown new light on the past of the Antae (P. N. Tretyakov, The Slavonic (Dnieper) Expedition, KS, X, 1941). Various archaeological researches of Antae antiquities have enabled Soviet scientists to draw a number of important historical conclusions.

In the first place, new excavations and the study of the materials previously obtained, have proved that the people who inhabited the area on the right bank of the Dnieper during the period of the Antae, were the same as those who inhabited this area previously, during the era of the "burial fields." Their culture, however, had lost the provincial-Roman traits peculiar to the tribes of the "bu-

rial fields", and had acquired a more original character. The reason for this will become clear if we recall the invasion of the Black Sea area by the Hunnish tribes, which had for long isolated the Dnieper Slavs from the Black Sea and at the same time assisted in the establishment of closer ties between tribes of the middle Dnieper and inhabitants of the northern belt. The migration of the nomads had also resulted in a considerable shifting to the west and north of the ancient Slav population from the woodlands and steppelands on the left bank of the Dnieper.

Secondly, it has become quite clear that the Antae tribes were bearers of a comparatively well developed culture, which had imbibed the century-old heritage of the ancient Black Sea and Dnieper areas. There is no doubt that the Antae practised field agriculture and stock breeding, were skilled in metal working, while their jewellery is amazing for its highly developed craftsmanship. Unfortunately, there is not a single settlement of the Antae era which has yet been studied by means of archaeological excavations.

There is reason to believe that besides the numerous small settlements scattered along the rivers of the right bank of the Dnieper, the Antae also had large settlements which were prototypes of the future towns of Kiev Rus.

Further, in spite of the fact that Antae antiquities on the Southern Bug and the Dniester have not been studied at all, all material available enables us to assert that the historical and cultural life of the Antae tribes had its centre not in the West, but in the East, along the Dnieper,—the most important artery of the economic, cultural, and, probably, political life of the Antae. Moreover, the Dnieper territory around Kiev and especially to the south of it, was of particular importance in the Antae period. It is here that most objects dating back to the Antae period have been discovered (B. A. Rybakov, Ibid.).

And, finally, the study of the traces of Antae culture and in the culture of Kiev Russ enables us to speak of the existence of strong genetic ties between them. Thus it becomes clear that Kiev Russ was not so much the beginning of the full-blooded political life of the Eastern Slavs as the result of the long road which they had already traversed (B. A. Rybakov, Ibid.).

Kiev Russ, however, was not merely a continuation of the Antae period. Russ of the ninth-tenth centuries represented a phenomenon considerably more complex, in whose formation other groups of Eastern Slavs, besides the Antae, took an active part.

It would be absolutely wrong to follow the old tradition and place a sign of equality between the Antae and the Eastern Slavs as a whole. In spite of the opinion held by A. A. Shakhmatov, such scientists as M. S. Grushevsky, L. Niederle, N. I. Sreznevsky, and many others, regarded the Antae merely as a southwestern branch of the Eastern Slavs. At present, when it is being ascertained that the sphere of Slavonic ethnogeny in Eastern Europe had not been limited to the Scythian Dnieper and that other tribes besides those of the "burial fields," formed part of the ancient East Slavonic tribes, it is possible to form a clear picture not only of the Antae group, but also of the other groups of Eastern Slavs. Moreover, it appears that tribal formations among Eastern Slavs had been known even in the Antae period. These were subsequently mentioned in the chronicles of the eleventh-twelfth centuries.

The Antae tribes themselves were not a completely homogeneous ethnic group. As a result of archaeological excavations carried out during the past few years, a special group has begun to be defined in the region of Kiev Polesie, which differed somewhat from the tribes residing farther south, along the Dnieper and in the basin of the Rossi. Doubtless, the tribes residing to the west also had their peculiar features, but the abundance of blank spaces on the archaeological map of Slavonic history in the Ukrainian S. S. R. hinders us from differentiating the Antae group. We can, however, speak with absolute certainty of the differences between the Antae group and the Slavs mentioned in the Northern Chronicles.

Pre-revolutionary archaeology had at its disposal only a few memorials relating to the Slavs who had populated the left bank of the Dnieper. These were settlements along the upper course of the river Sula, near the town of Romny, which had been studied by N. E. Makarenko. At present we possess archaeological data from the Desna and the Sejm (V. I. Levenok, Archaeological Work of the Trubchevsky Museum, KS, X, 1941, L. N. Solovyov, Camps and Settlements in the Vicinity of Kursk). In the course of the past few years,

research work has been carried on in settlements located along the upper and middle courses of the Vorskla (P. N. Tretyakov, KS, I, 1939). It has been found that in all this vast territory traces exist of a homogeneous Slavonic culture of the second half of the first millennium of our era, a very typical culture, which had taken shape outside the periphery of the Black Sea area, outside the routes of the "great migration of peoples." The economic and social life of the "Romny" tribes was much more primitive than those of the Antae. But, beginning with the seventheighth centuries, these tribes began to appear on the historical arena as an active political force. Archaeological researches have shown that precisely during these centuries there began the migration of Slavonic tribes from the basin of the Desna and the Sejm, south and southeast, to the basin of the Donetz and the Don; this migration terminated in the settlement of the Slavs in the Lower Don and the Taman, and was marked in Byzantium by the appearance of the Black Sea of the (I. I. Lyapushkin, The Slavo-Ross-Russ Settlements of the Ninth-Twelfth Russian Centuries on the Don and the Taman. World Institute of Archaeology of the U.S.S.R., No. 6, 1941). No doubt exists as to the tremendous role played by the southwestern tribes in the formation of the ancient Russian State. The ancient necropolises of Kiev and Chernigov bear witness to the fact that both the descendants of the Antae and the emigrants from the left bank of the Dnieper had populated these cities. At the same time these two ethnic elements have been found both in ordinary and in rich burial places (P. N. Tretyakov, The Northern East Slavonic Tribes. World Institute of Archaeology of the U. S. S. R., No. 6, 1841, p. 34).

In the middle of the first millennium of our era, another group of Eastern Slavs appeared along the upper course of the Oka—the Vyatichi. Their habitations are marked both by peculiar settlements and burial mounds with special structures for burning corpses (P. N. Tretyakov, Ibid., pp. 47—53). Archaeological field excavations carried on after the revolution along the Oka, in the area around Kaluga, as well as in the Tula and the Orel Regions, greatly assisted in the study of this group.

Almost completely unexplored as yet are the ancient Slavonic memorials in the basin of the River Sozh. But there is every reason to believe that here too, in the land of the Radimichi, a peculiar Slavonic culture is to be found beginning with the second half of the first millennium of our era.

These three groups: the Severiane, the Vyatichi and the Radimichi, as has been proved by archaeological data, had common traits which distinguished them not only from the Antae tribes, but from the Slavonic tribes which inhabited the upper parts of the Dnieper, the Dvina and the Volga, as well as the Valdai Plateau.

In these northern regions, peculiar burial structures of two types have been known for a long time: long tumuli and mounds belonging to the second half of the first millennium of our era. During the last few years these have been carefully studied and a summary made of all the material on hand. At the same time new archaeological excavations have been made, the chronology has been checked and archaeological maps compiled. As a result it has been found that the long tumuli and mounds, whose ethnic origin caused so many debates, are indisputably of Slavonic origin and give a clear picture of two regions: the long tumuli—the land of the Krivichi, and the mounds—the lands of the Novgorod Slovenes (P. N. Tretyakov, Ibid., pp. 37—45; N. N. Chernyagin, Long Tumuli and Mounds, World Institute of Archaeology of the U.S.S.R., No. 6, 1941). There are no traces whatever of either Lithuanian or East Finnish tribes in these regions. Archaeological relics of the Leto-Lithuanians, the Baltic Chud tribes, the Volga Meri, the Oka Muroms and Mordovians are now well known. As has been proved by archaeological data, the ancient domiciles of these tribes, identified by archaeological findings dating back to the first centuries of our era, lay outside the limits of Slavonic settlements.

Various archaeological data also provide information concerning the migration of the Slavs northward—to the Volkhov and the Luga, as well as eastward, to the lands of the Volga Meri. New archaeological researches outline the routes of this colonization which began in the seventh-eighth centuries in the north, and somewhat later on the Volga—in the eighth-ninth century (P. N. Tretyakov, Ibid., pp. 45—47; Y. V. Stankovich, The Ethnic Composition of the Population of the Yaroslav Volga Area in the Ninth-Tenth Centuries, World Institute of Archaeology of the

U. S. S. R., No. 6, 1941). A clear picture has also been provided of the significance of the Volga trade route to the east, a more ancient route than the Baltic-Dnieper route.

And finally, the least known at the present time are the ancient Slavonic memorials of the lands inhabited by the Dregovichi. However, the study of the settlements located in the southern districts of Byelorussia have resulted in the discovery of certain traits peculiar to the local Slavonic culture.

In their attempt to penetrate to the depths of the East Slavonic past, former historians always proceeded from the theory of a single Slavonic culture, regarding the East Slavonic tribes as a homogeneous body in regard to their social order, culture and economy. Contemporary archaeology, which now actually deals with traces of the real Slavonic past, holds different views. While Slavs of the second half of the first millennium of our era possessed characteristic traits which on the whole distinguished them sharply from Chud, the Volga Leto-Lithuanian, North tribes and the nomads of the steppes, within the East Slavonic tribes themselves numerous local differences existed both of a culturalethnic character and with regard to different rates of historical development, primarily in the north and south. This makes comprehensible to archaeologists the apparent contradictions in the descriptions of Eastern Slavs, given by Arabian and other ancient authors who had dealings with Slavs from the most varied regions.

On the middle Dnieper and the regions on the right bank of the Dnieper, Slavonic tribes had evidently done away with the clan order as far back as the first centuries of our era. The territorial commune (verv) was their prevailing form of social relations. Its economic basis consisted of field agriculture, comparadeveloped crafts, and barter. The Roman coin represented a very important element in the economic life of the forefathers of the Antae tribes, who had undoubtedly conducted extensive trade with peoples from the Black Sea area (B. A. Rybakov, The Early Culture of the Eastern Slavs, IZH, Nos. 11—12, 1943). Information gleaned from Byzantine authors with regard to the economic and social life of the Antae supports this.

Things had been quite different in the north. While in the Black Sea area, during the first centuries before and after our era historical development had been rapid, in the north life continued to preserve its ancient rhythm. In the middle of the first millennium of our era a patriarchal clan order held sway along the tributaries of the Dnieper and the upper Oka (P. N. Tretyakov, The Northern Tribes, World Institute of East Slavonic Archaeology of the U.S.S.R., No. 6, 1941). Small fortified settlements, patriarchal nests similar to the upper Volga settlements, on the River Sonokha, were the basic form of settlements (P. N. Tretyakov, On the History of Tribes of the Upper Volga in the First Millenium of Our Era, World Institute of Archaeology of the U. S. S. R., No. 5. 1941, pp. 51-68). They practised the most primitive forms of agriculture (by clearing plots in the forests) (P. N. Tretyakov, Agriculture in Eastern Europe, IGAIMK, Vol. XLV, issue I, 1932); an important place in their economy, beside agriculture and stock raising, was fishing and hunting.

Gradually they took up metal working. Their trade with remote countries was very inconsiderable and had hardly any effect on the social and economic life of the northern tribes.

After the sixth century of our era, the picture began to change considerably. The tribes of the right bank of the Dnieper, having reached the highest stages of the primitive communal order under complicated and difficult conditions imposed by the invasion of the Huns, the Balkan Wars, their struggle against the Avars and the Bulgarian tribes, had, as it were, slackened their development, accumulating strength for the future. As a result of the Balkan events of the fifthseventh centuries, the centre of political life had evidently shifted to the west of the Dnieper, where a tribal union of the Dulebs arose which is presumed to have had the form of a primitive state. Unfortunately, archaeological science is as yet unable to say anything about the Dulebs, or about their archaic state, for archaeological remains along the Western Bug are still waiting to be explored.

During the same period, other East Slavonic tribes had been experiencing a period of rapid economic and social development as though in pursuit of their southern brothers. On the basis of archaeological material, it is possible to state that in the territory of the upper Dnieper, in the basin of the Desna and the upper Volga, Slavonic tribes had in the course of the sixth-eighth centuries been gradually abandoning the clan order; the territorial commune was becoming the prevailing form of social order. So far the paths of this process are far from clear, but one thing is certain—that a tremendous role was played by the transfer from ancient primitive agriculture to field agriculture, and by the development of crafts and barter. Archaeologists are well aware of the fact that precisely during these centuries the ancient forms of fortified settlements began to disappear and were replaced by huge new settlements. An example of these can be seen in the remarkably preserved material of the Voronezh settlement of the eighth-tenth studied by P. P. Efimenko (P. P. Efimenko, Early Slavonic Settlements on the Middle Don, SGAIMK, No. 2, 1931). During period, too, the first iron ploughshares and other implements of field agriculture put in their appearance; from being a meat-providing beast, the horse became a draught animal and little by little the use of horse meat was discontinued.

It was in a situation such as this that there began the above-mentioned migration of the northern Slavonic tribes to the Volkhov and the Volga, to the lands of the ancient Meri, and, what was particularly important, to the south and the southeast: to the Don, the Donets and the Taman. This was due to the fact that at this particular time the northern Slavs had reached the same order of life as that which two centuries earlier had forced the Antae to migrate southward. They had

now become interested in fertile lands (P. N. Tretyakov, *Northern East Slavonic Tribes*. World Institute of Archaeology of the U. S. S. R., No. 6, 1941, pp. 34—35).

In this way, by the eleventh-twelfth centuries, different groups of Eastern Slavs had to a considerable degree reached the same stage of development with regard to their social, economic and cultural life, and had become still more consolidated ethnically. Thus, in the course of centuries, the ground had been prepared among Eastern Slavs for

the appearance of the Kiev State.

In their attempt to annihilate and enslave the Soviet people, the German fascist barbarians systematically destroyed all scientific and cultural values, including memorials of the Slavonic past. They plundered and destroyed valuable collections in the Kiev Museum, in museums located in Chernigov, Poltava, Minsk, Pskov and Novgorod, as well as in scores of others located in the Ukraine, Byelorussia and the Western regions of the R. S. F. S. R. They also destroyed numerous archaeological documents. As yet we are not in possession of sufficient statistics to fully estimate the extent of German vandalism, but it is certain that the Germans destroyed many memorials of the Slavonic past which had not yet been studied: settlements, burial grounds, tumuli, etc. That is why, in speaking of the tasks confronting Soviet archaeology with regard to the study of the material data of Slavonic history, we must not only engage in historical researches, but also in restoring, in the shortest possible time, collections of Slavonic antiquities in our museums, in order to familiarize Soviet people with the memorials of Slavonic history and culture.

FROM THE HISTORY OF RUSSIAN CULTURE

K. A. TIMIRYAZEV

(On the Twenty-Fifth Anniversary of His Death)

By

V. L. Komarov, Member of the Academy of Sciences of the U. S. S. R., N. A. Maximov, Corresponding Member of the Academy of Sciences of the U. S. S. R., Professor B. Kuznetsov

LIMENT ARKADIEVICH TIMIRYAZEV, one of the most remarkable of Russian scientists, died twenty-five years ago.

Timiryazev was born on 22 May, 1843. In his childhood, he became imbued with revolutionary-democratic ideas and tendencies by his parents. On the first page of his book *Science and Democracy*, which he dedicated to his parents, Timiryazev, addressing himself to them, wrote:

"With my first glimmerings of understanding, in that dark time when, in the words of the poet, 'not a single seed capable of bearing forth pure, humane life, fell on the soil of my native land,' you implanted in me, by your words and your example, a boundless love of truth and a burning hatred of every untruth, especially social untruth" (Collected Works, Vol. IX, p. 11).

K. A. Timiryazev's father, Arkadii Semyonovich, held consistent republican views. After retiring from military service he served as the director of a customs office, but his reputation for being politically "unreliable" finally left him without work. For this reason, when his son Kliment was sixteen years old, his numerous family was left without any means of subsistence and the youth had to go to work.

K. A. Timiryazev was born in St. Petersburg, and his childhood was filled with impressions of that great city. In an article called St. Petersburg and Moscow Timiryazev wrote: "From the very beginning of the last century St. Petersburg has meant for me either my own impressions or living legend" (ibid. Vol. IX, pp. 275—276).

His family early aroused in Timiryazev an interest in natural science as well as in social problems. His eldest *brother, *Dimitrii, greatly influenced his scientific interests. He was a prominent specialist in agricultural and industrial statistics.

From him Timiryazev was also able to acquire certain elementary skills in performing physico-chemical experiments. Dimitrii Timiryazev set up a laboratory in his home for refining oil and Kliment helped him with his experiments.

Kliment Timiryazev grew to young manhood at the beginning of the 1860's. These years determined the whole course of his scientific and social aspirations.

A characteristic feature of these years was an unusual quickening of interest in the natural sciences in Russian society, wide diffusion of the idea of social duty, the desire to employ the data of science for the enlightenment and liberation of the people.

Influenced by the great Russian democrats, Dobrolyubov and Chernyshevsky, Timiryazev adopted a sharply hostile attitude towards all half-measures, towards reformism, towards attempts to restrict the creative revolutionary initiative of the people.

In the activities and views of Pisarev, Timiryazev saw proof of the highly important social role that natural science played in the 'sixties. Timiryazev wrote that Pisarev's works showed "how deeply the society of that day was aware of the educational and philosophical rather than the narrowly utilitarian significance of that same natural science, the study of which the common



Kliment Timiryazev

Russian man had so recently looked upon as just another incomprehensible, lordly extravagance" (Ibid. Vol. VIII, p. 175).

One of the principal features of biology during the 'sixties was the popularity of experimental methods and the wide use of experiments in the course of university instruction.

During the latter half of the 'fifties the faculty of the St. Petersburg University was enriched by the addition of Tsenkovsky, whose experiments greatly contributed to the advancement of botany in Russia and influenced the development of other branches of biology. Tsenkovsky's successors in the University of St. Petersburg were A. N. Beketov and A. S. Famintsyn. Under them the department of botany was divided into two groups: morphology and physiology. Famintsyn chose plant physiology as his speciality, as a result of which plant physiology became

an independent subject of study in the University of St. Petersburg sooner than anywhere else in the world. This University laid the foundations of a school of young Russian physiologists (Rozanov, Baranetsky, Natalin, Borodin).

Darwinism and the discovery of spectral analysis exerted a tremendous influence on the prevailing world outlook of the 1860's.

"The writer of these lines," Timiryazev once wrote, "has himself taken a modest part in both these movements and has had the singular joy of standing close to their great founders. As a biology critic, five years after the appearance of Darwin's book I came out as a convinced supporter of his theory, while as a physiologist and experimenter I had, because of the very nature of the task I had undertaken, to employ the inspired method of Bunsen and Kirchhoff. I hastened to take the first opportunity to acquaint myself with this method under the direction of the very man who discovered it. Later, I applied it to the solution of problems in physiology."

In 1861. K. A. Timiryazev entered the natural science department of the University of St. Petersburg. Many years later, in 1905, in an article called *On the Threshold of a Regenerated University* he recalled his student years and spoke of the deep social aspirations of the student body.

In 1862 Putyatin, the Minister of Education, demanded that every student sign a so-called pledge not to take part in public disorders. Those who refused to sign the pledge were banished from the capital.

"One had," wrote Timiryazev, "either to bow to the new police system or to give up the university, perhaps give up science forever—yet thousands of us never hesitated in making our choice. It was not, of course, a matter of some paltry pledge but a matter of the conviction that in our modest way we were contributing to the common cause, repulsing the first breath of reaction, the conviction that it would be disgraceful to surrender to this reaction" (Collected Works, Vol. IX, p. 46).

The most capable, advanced and nobleminded young men of that generation sacrificed science for the sake of social duty, and Timiryazev was among them.

Half a century later Timiryazev wrote about this: "Today when I am in my seven-

ties and can look back upon my remote youth like an impartial spectator, I thank my fate or, rather, the milieu in which I found myself, that I did just what I did. Science was not lost to me—it is never lost to those who love it sincerely and disinterestedly, but what would have happened to my moral character had I failed to withstand the first test, had my first moral struggle ended in a compromise!" (Ibid. Vol. IX, p. 46).

A whole year passed before Timiryazev could return to the University as an extra-

mural student.

Besides his work in physiology and other scientific subjects Timiryazev also began to engage in journalism during his student years. His journalistic and popularizing activities reflected the social ideas and moods of the 'sixties. A list of the articles Timiryazev wrote while still a student is very indicative. In 1864, for instance, he wrote the articles Garibaldi on Caprera and Famine in Lancashire. That same year Timiryazev began contributing articles on Darwinism to the journal Otechestvennye Zapiski (Homeland Notes), and the next year he published a book entitled A Brief Account of Darwin's Theory.

In 1866 Timiryazev was graduated from the natural science department of the University of St. Petersburg. For his Master's degree he wrote a thesis on liveworts. Two years later, at a congress of natural scientists, he read his first paper on The Decomposition of Atmospheric Carbon Dioxide by Plants under the Influence of Solar Light.

Timiryazev's major work The Significance of Rays of Various Degrees of Refraction in the Decomposition of Carbon Dioxide by Plants. This work laid the foundations of a

new trend in botany.

This trend consisted in the application to plant physiology of the principle of the conservation of energy. Timiryazev wanted to show that light energy is transformed into potential energy in the process of carbon dioxide assimilation by the plant. This important problem was solved by first solving another, narrower and more specific problem. In order to prove that a transformation of energy does take place in the plant, that plant physiology is subordinated to the principle of the conservation and transformation of energy that is general for all natural science, it was necessary to demonstrate expe-

rimentally that the assimilation of carbon dioxide by green leaves proceeds most successfully in the presence of those rays that carry the most energy.

Until Timiryazev's time it was considered that the decomposition of carbon dioxide does not directly depend upon radiant energy and that, on the contrary, it was the brightest rays of the spectrum that most facilitated this process.

In his work The Sun, Life and Chlorophyll Timiryazev traced the gradual evolution of another view of the ties between the sun and physiological processes in plants. The most fundamental fact in the history of natural science and the one that paved the way for a new stage in the development of our knowledge of plant physiology was the law of the conservation of energy. Besides this, a number of discoveries made in the nineteenth century gradually led to the replacement of the subjective division of light into different colour rays by their objective division into waves which differed from each other only in frequency. Gradually there developed a lucid conception of radiant energy.

Timiryazev, a consistent adherent of the objective method in natural science, imbued with a profound understanding of the law of the conservation of energy and the electromagnetic theory of light, consistently applied these new (at that time) scientific principles to all the aspects of plant physiology. In the preface to his book *The Sun, Life and Chlo-*

rophyll, Timiryazev wrote:

"I was the first botanist to uphold the law of the conservation of energy and in accordance with this to replace the word 'light' by the expression 'radiant energy.' This was not the mere substitution of one word for another, but a vital alteration in viewpoint" (Collected Works, Vol. I, p. 100).

If light is the diffusion of energy, the work performed by the solar ray should explain the sun's influence on the life of a plant.

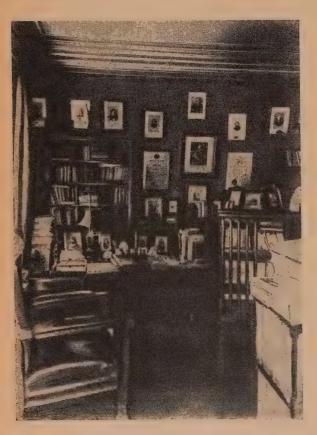
Draper asserted that yellow light, the brightest and the one that acts most strongly upon the eye, also acts most strongly upon plants. On the basis of a whole series of new chemical and physical discoveries Timiryazev disproved this hypothesis. He analyzed the experiment performed by Draper and showed that carbon dioxide decomposes most in the presence of the infra-red rays of the spectrum. Consequently, the decomposition

of carbon dioxide does not depend upon the

thermal energy of the light rays.

Timiryazev demonstrated that plants are acted upon by the red rays which possess the greatest amount of energy and that the decomposition of carbon dioxide is caused by those rays which are absorbed by the plant. By these works Timiryazev won recognition throughout Europe with the exception of certain circles in German science. The nationalistically-minded German physicists and botanists denied the importance of Timiryazev's work which refuted the traditional views of German authorities. Sachs and Pfeffer, followed by many others, continued to clutch at the obsolete views. French and English scientists, however, appreciated the importance of the new ideas, which were subsequently fully confirmed and accepted.

Timiryazev continued to develop his theory of chlorophyll. In his opinion chlorophyll is an optic and chemical sensitizer which allows light to act chemically upon carbon



Timiryazev's Study

dioxide. Since carbon dioxide is colourless, it does not absorb light. Timiryazev then demonstrated that the photochemical action of a ray does not depend only on the degree to which it may be absorbed, but also on the energy and amplitude of the vibrations of the waves that enter into its composition.

Timiryazev studied the absorption of carbon from a quantitative point of view and established the fact that the assimilation of carbon given low intensities of light is proportional to the quantity of light. With an increasing intensity of light, assimilation lags behind the quantity of light and reaches its maximum at an intensity that is approximately equal to half the intensity of a solar ray falling upon a leaf in the normal direction. If the intensity of light continues to increase, assimilation no longer increases. Therefore, when the sun shines particularly brightly a certain quantity of light cannot be employed for the assimilation of carbon dioxide and merely causes the leaves to become overheated. As a result of a long process of biological evolution the plant avoids the harmful effects of excess light by turning its leaves edgewise to light. This property is highly developed in so-called "compass plants."

Timiryazev thus flung a bridge between the two most important trends of natural science in the nineteenth century, between Darwinism and the law of the conservation of energy, between biology and physics, between the historico-biological and experimental-physiological investigation of the organic world. This synthesis accords with Timiryazev's world outlook, with his conception of experiment and practice as the criterion of scientific truth, with his idea of the constant development of science, with his belief in the physical unity of the forces of nature, with his denial of mystic "hidden forces", with his opposition to all metaphysics.

Between 1868 and 1870 Timiryazev studied and worked abroad, under the direction of Kirchhoff, Bunsen, Hofmeister, Claude Ber-

nard, Berthelot, Boussingault.

In Paris Timiryazev moved in the circles of emigrated Russian revolutionaries. In 1870 Herzen came to Paris and Timiryazev hoped that he would have the opportunity of meeting the man who had so largely influenced his youthful ideas. Unfortunately, Timiryazev could only attend the funeral of the great exile. This, however, was a memorable event

in his life. At that period he was drawn both towards the struggle for liberation and towards a knowledge of natural science and he succeeded in combining these interests all through his life.

Upon returning from abroad Timiryazev received his Master's degree for a thesis on *The Spectral-Analysis of Chlorophyll* (1871), and was elected a professor extraordinary at the Petrovsky Academy of Agriculture. Four years later he published his Doctor's thesis: *The Assimilation of Light by Plants* (1875). After this Timiryazev became a regular professor in the Petrovsky Academy and soon after (1877) took the chair of plant anatomy and physiology in the Moscow University.

In the 'seventies, while in the Petrovsky Academy and later in the Moscow University, he became the pivot around which the radical elements among the professoriate and the student body gathered. In those years the writer Vladimir Korolenko was a student in the Petrovsky Academy. With a group of other students he was expelled from the Academy for participating in the liberation movement. Timiryazev passionately defended him.

Timiryazev combined his work in the Petrovsky Academy and in the Moscow University with frequent trips abroad. During these trips Timiryazev enlarged and deepened his acquaintanceship with foreign scientists. In 1877 he met Darwin and subsequently described his impressions in an article called With Darwin in Down. In it he gave the following picture of the great scientist:

"Darwin's calm, majestic figure and his white beard makes one think of portraits of Old Testament patriarchs or of ancient sages. His quiet, gentle, caressing voice completes the impression. You completely forget that only a minute ago you were interested in him merely as a great scientist. It seems to you that you are facing an old man who is dear to you, whom you have long ago grown accustomed to love and respect as a person, as an individual of imposing moral qualities... In our conversation, serious thoughts alternated with gay jests. The extent of his knowledge and the accuracy of his views in branches of science in which he never engaged personally was astonishing. He characterized the activities of certain scientists with neat but always inoffensive irony. He expressed some very correct ideas about Russia in reference to the book by

Mackenzie-Wallace which he was reading at the time, indicating the good qualities of the Russian people and prophesying a bright future for them" (Collected Works, Vol. IX, pp. 55—57).

Timiryazev was the most distinguished of the Russian Darwinists. He it was who dealt the most crushing blows to the anti-Darwinists who at the end of the last century repeatedly tried to replace the theory of natural selection with some new or, on the contrary, some old hypothesis. These attempts rapidly acquired wide renown, only to be forgotten just as rapidly.

To cite a particular instance: Timiryazev sharply objected to all attempts to oppose Mendelism to Darwinism, to substitute Mendel's theory for Darwin's. It should be noted that in their polemics against Darwinism, the German Mendelians made much ado about Mendel's being a true German, which in itself sufficed to make him superior to the Englishman, Darwin. They insisted that German science, breaking away from world progress, must raise the banner of the "truly German" theory of Mendel. Timiryazev was scathingly contemptuous of this anti-scientific, reactionary, nationalistic preaching.

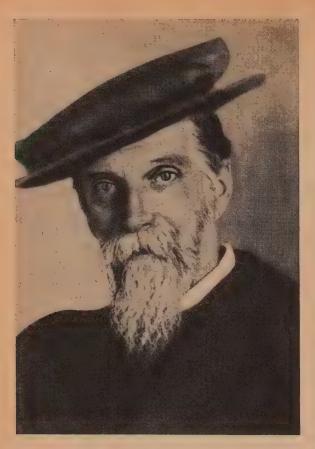
"The future historian of science," wrote Timiryazev, "will probably look with regret upon this invasion by clerical and nationalistic elements into the brightest field of human endeavour, a field whose only purpose is to discover the truth and to protect it from all unworthy alloys" (Collected

Works, Vol. I, p. 143).

In Russia in the 1880's one of the greatest opponents of Darwin was Danilevsky who in 1885 published a voluminous work in criticism of Darwin's ideas. Timiryazev replied to Danilevsky with scathing criticism. The reactionary journalist Strakhov took up the cudgels on Danilevsky's behalf and immediately found himself under a hurricane fire of pamphlets and popular scientific articles by Timiryazev.

Timiryazev's sharp social interests, the clarity of his principal scientific ideas, his view that the mission of science was to serve the people, his lofty ideals, all combined to raise his propaganda of Darwinism to the level of the most distinguished social thought in Russia at the end of the last century.

In the 'nineties, reaction struck more and more frequently against the revolutionary-



Professor Timiryazev in the Cap and Gown of Doctor of Cambridge University

minded students and the radical professors of the Petrovsky Academy. In 1892, therefore, Timiryazev was discharged from the Academy.

Meanwhile his propaganda of Darwinism continued unabated. Timiryazev just as energetically attacked the neo-vitalists, who in the 'nineties and later very frequently began to revive the idea of a "vital force" and of biology's absolute independence of the general laws of physics and chemistry.

Timiryazev's opposition to the neo-vitalists met with the ardent approval of a number of progressive Russian scientists. His speech against neo-vitalism at the Moscow Congress of Natural Scientists evoked a sympathetic response from the famous Russian embryologist, A. O. Kovalevsky.

His defence and elaboration of Darwinism, his struggle against mysticism and obscurantism, his extensive public activities, made Timiryazev extremely popular among progressive circles of the Russian intelligentsia in the 'eighties and 'nineties.

But the reaction grew, and after depriving Timiryazev of his chair in the Petrovsky Academy in 1892, it subjected him to such disagreeable experiences in the Moscow University that he was almost forced to leave that institution as well. In 1899 the so-called temporary rules for universities were passed, in accordance with which students who took part in the liberation movement were to be sent to the army immediately. This misfortune very soon befell 183 students of the Kiev University. The lot of the Kiev students became known all through Russia and provoked a wave of protests at student meeting in all university cities.

Timiryazev suggested to the professors of the Moscow University that they collectively sign a petition demanding the repeal of the temporary laws. The majority on the Council of Professors refused to support him. As a result he received an official reprimand, and tendered his resignation. On this occasion, however, he remained in the University, but twenty years later he at last had to leave it together with a large group of his colleagues.

From 22 to 24 June, 1909, the Cambridge University celebrated the fiftieth anniversary of the publication of Origin of Species. Hundreds of scientists from all parts of the world gathered there for this occasion. Timiryazev was among them. His article about this ceremony was published in Books XI and XII of Vestnik Evropy (European Bulletin, 1909). As brilliant as all of Timiryazev's articles were, this one stands out for the liveliness and freshness of his impressions, the profundity of his ideas and for his startling comparisons and images.

In it Timiryazev compared Darwin's work with that of Cambridge's two other greatest scientists—Bacon and Newton. This historical comparison again emphasizes the principal feature of Timiryazev's own work, which united purely physical and biological views. It is about this aspect, about the bond between physics and biology, that Timiryazev speaks in his article about the Cambridge celebrations.

At this celebration the Cambridge University likewise conferred an honourary Doctor's degree upon Timiryazev. It is the tradition

in such cases that a speech be delivered in Latin giving a brief characterization of the person receiving the honourary degree and also some jest and quotation from the works of a classical writer. The public orator Sandis had performed this function in Cambridge for many years, and thirty-three years before had similarly greeted Charles Darwin.

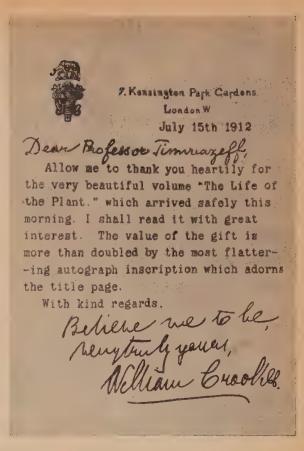
In speaking about Timiryazev, Sandis referred to a lecture given by Timiryazev many years ago in the Royal Society. This lecture concerned the influence of solar light upon the assimilation of carbon dioxide by plants. For this reason Sandis recalled "the legendary fosterling of our University, Gulliver, who on the island of Laputa saw a venerable professor who discoursed about the absorption of solar rays by a cucumber." Sandis then recalled that Timiryazev had demonstrated the importance of the red rays of the spectrum for the organic world and accordingly cited the words of the Bible about the rainbow which was a symbol of the union between God and men after the deluge.

This ceremony concluded the official program of the celebration.

At the beginning of 1911 police repressions connected with student unrest evoked a protest from the Moscow University. As a result the rector of the University and his assistants were discharged. Thereupon 124 professors and associate professors of the Moscow University tendered their resignations.

Among these professors was a young contemporary and friend of Timiryazev, the brilliant Russian physicist, Pyotr Nikolayevich Lebedev. On the initiative of Timiryazev and a few other scientists, public funds were collected to build a physics laboratory in which Lebedev and his pupils could continue their work. Lebedev, however, had a weak heart and its condition was so aggravated by the tragedy of his departure from the University, that he died soon after this.

The events of 1911 estranged Timiryazev not only from ruling circles but from certain liberal elements among the Moscow professoriate as well. Timiryazev saw the liberals in the bright light of the growing social struggle and turned away from them forever. Timiryazev's political views steadily became of a more consistently revolutionary nature.



Facsimile of a letter from Sir William Crookes

In the pre-war years, world science and Russian society became more and more accustomed to seeing in Timiryazev the living conscience and wisdom of Russian science. On 22 May, 1913, the whole world marked Timiryazev's seventieth birthday. Foreign scientists, especially in France and in England, sent Timiryazev ardent greetings. The eminent British scientist, Francis Darwin, son of Charles Darwin, wrote how warmly and with what respect his father had always spoken about Timiryazev. The distinguished British botanist, Frost Blackman, said that Timiryazev was one of the most popular and esteemed scientists in England. Farmer wrote that Timiryazev was the most brilliant botanist of his time. The Royal Society, the Cambridge University, universities in Glasgow and Geneva, the Edinburgh and Manchester Botanical Societies and other scientific associations of which Timiryazev was a member, warmly greeted him. With just pride Russian scientists noted the scientific merits of their great colleague and contemporary. I. I. Mechnikov, I. P. Pavlov, M. A. Menzbir, S. N. Navashin and others sent him cordial congratulations. At the official celebration I. P. Pavlov said:

"Like the plants he so ardently loves, Kliment Arkadievich has himself strained towards the light all his life, storing up in himself treasures of wisdom and higher truth. He himself has become a source of light for many generations aspiring towards light and knowledge, seeking warmth and truth under the severe conditions of life."

This likening of Timiryazev to the principal object of his scientific investigations was very apt and profound and remains true for both his physiological discoveries and his social and scientific outlooks.

Timiryazev became acquainted with Marxism and with Karl Marx' Capital at an early date, in 1867, being one of the Russians to do so. This first acquaintanceship, however, did not definitely influence him. Timiryazev came to adopt Marxism as a result of a series of social and political events, and at the same time on the basis of the development of his scientific views. He understood that scientific biology is closely connected with the scientific interpretation of historical phenomena within the framework of a unified scientific, revolutionary outlook. In his book Science and Democracy Timiryazev included his article Charles Darwin and Karl Marx in which he compares the two great discoveries of the nineteenth century and points out that just as Darwin gave a causal explanation of biological processes, Karl Marx gave a scientific interpretation of social processes.

The world war of 1914—1918 caused Timiryazev to become more consistent than ever in his political convictions. In his article Science, Democracy and Peace he fearlessly made the most revolutionary deductions. He considered that only a fully consistent democracy, based on the revolutionary reorganization of society could save mankind. Timiryazev looked about to find the social forces that could save mankind from social injustice and falsehood. As a result he naturally came to support the Bolshevik Party.

On the eve of the Soviet Revolution Timiryazev took part in the elections to the Con-

stitutional Assembly and despite the fact that he was seriously ill at the time, the seventyfive year old scientist went to the polls to cast his ballot for the Bolshevik Party.

In the spring of 1917 Timiryazev read Lenin's April Theses in the Pravda and covered the margins of the newspaper with enthusiastic remarks. At last there had opened before the aged scientist's eyes the prospect of unparalleled progress for humanity. In the struggle waged by the Party of Lenin and Stalin he saw the path leading to a development of material productive forces, scientific knowledge and cultural values such as no one had yet been able to dream of. After the Soviet Revolution Timiryazev gave his all to the service of the revolution. The working people of Moscow elected Timiryazev to their Soviet.

Timiryazev's book *Science and Democracy* appeared in 1920. He sent a copy of it to Lenin and in reply received a letter in which Lenin warmly thanked him for it and praised the book highly.

Timiryazev received this letter shortly before his death. On 20 April he attended a meeting of the agricultural department of the Moscow Soviet and then worked late into the night over his book *The Sun, Life, and Chlorophyll*. This work had to be discontinued for on the next day Timiryazev fell ill with pneumonia. In the last moments of his life Timiryazev thought about his country and the future of his people. Turning to Dr. B. S. Weisbrod, he said:

"I have always tried to serve mankind and I am glad that at a time so critical for me I am attended by you, a representative of the which does truly serve mankind. I believe and am convinced that in carrying through the principles of Leninism, the Bolsheviks are working for the happiness of the people and will lead the people to this happiness. I have always been with you. Tell Vladimir Ilyich of my admiration for his inspired theoretical and practical solution of world problems. I count it a happiness to be his contemporary and a witness of his glorious work. My admiration for him knows no bounds and I want everyone to know it. Give all my comrades my sincere regards and my best wishes for their further successful work for the happiness of mankind" (In Memory of Timiryazev: 1920-1935. Moscow-Leningrad, 1936, p. 15).

ART AND LITERATURE

STALIN ON FOLKLORE

By E. Makarova

VLADIMIR BONCH-BRUEVICH recalls that Lenin, in commenting on the Smolensk Ethnographic Volume compiled by V. Dobrovolsky and a collection of Fairy Tales, by N. Onchukov, pointed out the necessity for a more profound study of folklore. He claimed that folklore represented an invaluable source for studying the people's yearnings and hopes. According to Bonch-Bruevich, Lenin suggested that the finest folk poems, tales, legends and sayings be recorded.

Stalin, as a man whose views on folk art are closely linked with his attitude toward the working people, has also stressed the need of constantly studying the practical ex-

perience of the people.

In his interview with the first American labour delegation in Russia, Stalin cited examples from the history of the Russian working class to show that its struggle for emancipation might have ended in failure had it not been supported by the broad masses. Comparing the Bolsheviks to Antaeus, the hero of the Greek myth, Stalin made the following statement in his speech at the Plenary Meeting of the Central Committee of the Communist Party in 1921:

"They, like Antaeus, are strong because they maintain connection with their mother, the masses, who gave birth to them, suckled them and reared them. And as long as they maintain connection with their mother, with the people, they have every chance of remaining invincible."

As Stalin expressed it, only the people are immortal, all else is transient. And the people live on in their creative work, which forms an inexhaustible source of inspiration for fine art.

In his interview with Soviet writers, artists, composers, theatre and cinema workers, Stalin invariably advises them to turn to the treasure house of national folklore in their quest for new genres and styles. When he spoke with the Azerbaijan composer Gadzhibekov who wrote the national opera Ker-Ogly, Stalin remarked that the opera's chief merit lay in the fact that it was based on folk art and its subject taken from a folk epic. In discussing the musical qualities of this same opera in which the composer strove to combine his own fantasy with folk art, Stalin noted that certain composers tended to underestimate the immense riches contained in folk music. According to Gadzhibekov, Stalin criticised those composers for not understanding that folk melodies are the product of centuries, during the course of which they have become so polished and refined that they reach us as a perfect form of art.

Socialist art should be created for the people and should be based on the art of the people themselves — this is the main tenet of all Stalin's utterances on art. Very interesting in this connection is the criticism made by Party leaders of Demyan Bedny's play Knights of Old, a play which was produced in 1936. In their remarks the leaders of the Party stated that the play distorted the people's idea of heroism, misinterpreted the history of the Russian people and their struggle with foreign invaders as reflected in folk poetry, and misrepresented the imposing characters of the legendary heroes found in

Russian folklore.

In a discussion with film directors about the plan for a film about Shchors, a Ukrainian Civil War hero, Stalin drew their attention to the necessity of utilizing Ukrainian national traditions, songs, and dances in the film. He pointed out that in showing Shchors and his comrades-in-arms, the director should also show the Ukrainian people, their specific national traits, their humour, their superb songs and dances.

On Stalin's initiative, recordings were made of new texts of Ukrainian folk songs distinguished for their richness of melody, poetic beauty and pointed humour. These songs have now become known to all the peoples of the Soviet Union.

According to the accounts of those who have talked with him, Stalin is well versed not only in the folk poetry of the Russian, Ukrainian and Georgian peoples but also of other nationalities including the people of Azerbaijan. Amiranishvili, one of the soloists of the Tbilisi Opera Theatre, recalls how at a reception given in the Kremlin for Georgian actors and singers, Stalin explained the proper way to render old Georgian songs. Alexandrov, People's Artist of the U. S. S. R., also relates that after a Kremlin performance of the Red Army Song and Dance Ensemble, Stalin's remarks on how the Volga Boatman song should be sung helped the composer to correct thematic inconsistencies in the text.

"Corrections were made both in the text and the rendition," writes Prof. Alexandrov, "and the song became more effective than we had ever imagined it could be... We were as much impressed by Stalin's astonishing memory and his profound knowledge of folk songs as by his exceptional taste in art. He repeatedly made suggestions for the repertory of the ensemble, reminding us of interesting songs which we had forgotten or had performed long ago.

"Stalin recommended the addition of folk songs to the Ensemble's repertory, urging us not to be afraid of including many of them in our program."

According to Stalin's biographers, his mother used to tell him many folk tales and old legends, imbuing him with a love for folk poetry while he was still a child. In his youth he was fascinated by the heroes of folk epics, fairy tales and songs. At school he was known for his talent for telling stories

about heroes of old. He astonished his friends by his stirring tales of the valiant deeds of legendary knights, of the brave warrior Georgi Saakadze and other national heroes who championed the interests of the Georgian people against their feudal oppressors.

Mari Kuzakova, in whose house Stalin lived during his exile in Solvychegodsk, recalls that he frequently sang popular revolutionary

songs with the village children.

*

Anfisa Tarasova and Ivan Saltykov give further information about Stalin's exile in Siberia. "He had a passion for songs," relates Ivan Saltykov, "and led them himself. One of his favourites was The Little Cudgel. Stalin left in the autumn. We would get together and start singing his favourite songs. I remember some of them—On a Rainy Saturday; A Little Cudgel; He Died, Poor Fellow, in an Army Hospital. One of the ones he liked best was Forward, Comrades, in Step...

The list of Stalin's favourite songs also includes Russian lyrics. Deeply emotional and profoundly stirring in their content, with varied melodies ranging from plaintive ballads to rollicking tunes, Russian folk lyrics are the best medium of expression for the specific traits of Russian psychology and character. They depict all the depth and breadth of the Russian temperament. Gorky once said that the Russian song was Russian history. There is, indeed, good reason for Stalin to devote so much attention to folk poetry, constantly reminding art workers of the necessity to make wide use of folklore in Soviet art.

In his speeches and writings Stalin himself often draws upon folk sayings, proverbs, legends, songs, etc. A study of his scientific works, reports and speeches makes it possible to establish the considerable influence of folk poetry on his language and style, in his manner of conducting conversation, on his sentence structure, his comparisons, humour, etc.

Stalin's language is distinguished for its conciseness, lucidity, simplicity, and the keen humour which is found in his speeches and writings. They abound in the sage utterances of the people, often of the Georgian people. There is no doubt, for instance, that Georgian

folklore figures in the title of the essay on Lenin in which he compares Lenin to a mountain eagle, thus creating a magnificent image of a leader whose courage, fearlessness, and valour inspire boundless admiration.

Stalin draws on Russian sayings and proverbs more than all others, using them with unsurpassed mastery. The clarity, trenchancy and figurativeness which characterise these proverbs, born of centuries of life experience, lend particular force of argument to one or another of Stalin's theories. Many proverbs and sayings acquire a political meaning in Stalin's speeches: "A fisherman knows a fisherman from afar", "If you're afraid of wolves, keep out of the woods", "No smoke without fire", "Only the grave can straighten a hunchback", etc.

Stalin's wartime speeches made particular use of sayings and proverbs. In them he turned the whole force of his sarcasm against the Nazi barbarians and their leaders. Aiming straight at the heart, he used a saying or a proverb as an artistic, figurative generalisation of a logically developed, consistently presented characterisation. With inimitable humour Stalin showed up "German might" for what it really was and dispelled the myth of the "much-vaunted invincibility" of the German fascist army so decisively defeated by the Red Army. Stalin relied on trenchant sayings and proverbs for his vivid satirical portraits of the enemy. In this way he ridiculed their utter lack of political principle, showed up the reactionary essence of the fascist party—a party of predatory imperialism, a party of Black Hundred pogrom makers and murderers of all democratic liberties. "Crows decked in peacocks' feathers..." he said in one of his speeches. "But no matter how much crows may deck themselves in peacocks' feathers, they will not cease to be crows," said Stalin of the fascists who donned the toga of "nationalism" and "socialism" to hide their true nature. Stalin gave an even sharper characterisation of the German fascist army which so loudly proclaimed the bravery of its officers. With what biting sarcasm did Stalin deride these "brave warriors" who displayed their "bravery" when dealing with unarmed prisoners and civilians but proved their cowardice when face to face with the organised might

of the Red Army. "Brave before a lamb, but a lamb before the brave." Thus Stalin used wise old sayings to dispel the myth created by the Germans about the "heroism" of their soldiers and officers.

Stalin ironically compared the Germans' ill-starred plans in the summer of 1942 to capture both Moscow and the Caucasus to a chase after two hares. In his speech of 6 November, 1943, Stalin used pithy proverbs and sayings to characterise the already badly mauled German fascists who had by that time lost all hope of world domination and were thinking only of how to get out of the mess alive. There is a strong flavour of folklore in his ironic remarks about how the fascists had anticipated dividing the "buns and pies" among themselves only to find themselves with nothing but the "bumps and black eyes" they had intended for their foes.

Thanks to his use of proverbs and sayings, Stalin's merciless satire becomes even sharper and more comprehensible to the broad masses.

Maxim Gorky, who profoundly appreciated Russian folk art, constantly reminded Soviet writers of the need to turn to folk poetry in order to enrich their poetic language and style. "I strongly recommend reading Russian folk tales and songs for a better acquaintance with the Russian language," Gorky's advice. "Read Afanasyev, Kireevsky, Rybnikov, Kirsha Danilov... Some of it may seem dull, but read it anyway! Fathom the charm of the vernacular, the sentence structure in folk songs and tales. You will see an amazing wealth of types, apt comparisons, simplicity, charm... Drink deep of folkloreit is as wholesome and invigorating as the fresh water of a mountain spring... Keep closer to the language of the people, seek after the simplicity, brevity and wholesomeness which can create a whole portrait in two or three words."

The national art of the peoples of the Soviet Union is growing and developing on the basis of the creative art of the peoples themselves. Their poetic genius has been aptly characterised by Mikhail Kalinin in the following words,

"The people, like gold-seekers, select and preserve and polish the rare treasures of their finding over a period of scores of years."

SERGE RACHMANINOFF'S MUSICAL LIFE¹

By Professor Constantin Kuznetsoff

SERGE RACHMANINOFF was born 1 April, 1873 on his mother's family estate at Oneg in Novgorod province. This brings to mind a long chain of musicians born in the Novgorod province, beginning with the Rogov brothers in the middle ages and ending with Rimsky-Korsakov. It is also interesting that Arensky, in whose composition classes Rachmaninoff studied at the Moscow Conservatory, came from the same province. Rachmaninoff was born on soil nourished by distinguished and longstanding musical traditions.

The first ten or twelve years of Rachmaninoff's life were closely bound up with his native province of Novgorod. The impressions of these early years were undoubtedly deep and lasting. The northern landscape, the local church with its choir and bells entered deep into the soul of that same Rachmaninoff who in 1893 wrote his first piano suite (Fantasia, Op. 5), the fourth part of which is based on the pealing of bells.

It is, of course, not only a matter of isolated musical associations. One feels their direct influence much less in Rachmaninoff than in another great genius of Novgorod origin—Rimsky-Korsakov. In his early works Rachmaninoff had no particular inclination toward folklore as such, showed no inclination to preserve the musical intonation, vocal style and instrumental effects of folk music. This tendency became apparent in Rachmaninoff only in his later years. His *Three Russian Folksongs for* chorus, with orchestra (op. 41, 1928) may be cited as an example. These compositions were however a result of new quests among the stores of folk songs

¹ This article is based on a report made by the author at a meeting of the Scientific Research Section of the Moscow Conservatory, and also at the Composers' Union on the occasion of the first anniversary of the death of Rachmaninoff. Constantin Kuznetsoff had access to the Memoirs of S. A. Satina (sister of Rachmaninoff's wife) whose manuscript was sent from the U. S. to VOKS.

and not echoes of old, childhood impressions. It is not in separate excerpts from folklore but in the very essence of Rachmaninoff's music that we find the imprint of the Russian north country, with the specific traits of the people of that region and the mood of the northern landscape.

In 1882 Rachmaninoff began to study at the St. Petersburg Conservatory but he did not really begin to take his studies seriously until he entered the Moscow Conservatory three years later, in 1885. There Rachmaninoff studied piano with Nikolai Zverev and Alexander Siloti and composition under Tanevev and Arensky. He finished the course in piano in the spring of 1891 and in composition in the summer of 1892, winning the Large Gold Medal for his one-act opera Aleko (libretto by V. Nemirovich-Danchenko, based on Pushkin's poem The Gypsies). Rachmaninoff wrote this opera at an almost incredible speed-it was finished in seventeen days!

Chaikovsky's comment on this opera has been preserved in a letter to Slatin, director of the Kharkov branch of the Russian Musical Society. After hearing the premiere, Chaikovsky wrote to Slatin "This charming composition pleased me immensely."

It may be said that Rachmaninoff made his debut in the art of composition with Chaikovsky's blessing in much the same manner as Pushkin ventured into the realm of poetry with Derzhavin to encourage him. When the fourteen-year-old Rachmaninoff took his examinations for promotion to the senior department of the Conservatory in 1887, Chaikovsky was a member of the board of examiners. Rachmaninoff made such a brilliant showing that Chaikovsky added three more plus signs to the 5+ that was the highest mark awarded to students.

Later on Rachmaninoff dedicated two of his works to Chaikovsky—Fantasia (for two pianos, opus 5) and Trio Elégiaque (opus 9).

The title pages of both these works bore the inscription "Dedicated to a Great Artist."

Let us return, however, to the people under whom Rachmaninoff received his musical education. During his junior course at the Conservatory he studied under Zverev and lived at his home practically as his ward until 1889. Without doubt Zverev was one of the most interesting Russian music teachers of that period. A pupil of Dubuque (of Field's school) and of Henselt (of Hummel's school), an ardent admirer of Anton Rubinstein, about whom he wrote a short essay¹, Zverev was well able to give his pupils (among whom was Scriabin) a thorough grounding in the "classical" style of piano playing.

Alexander Siloti, Rachmaninoff's professor in the senior department of the conservatory and his first cousin, introduced Rachmaninoff into quite another world of piano technique. There is no doubt that Siloti, who was Liszt's favourite pupil, taught Rachmaninoff to thoroughly appreciate Liszt's piano technique—his romantic or rather "neo-romantic" style of tone painting, his exquisite chiaroscuro, his play of dynamic and agogic contrasts. These characteristics summed up the main virtues of the romantic school whose art was reflected in Rachmaninoff's piano music more than in the works of any other Russian composer, even to its disputable aspects such as its overemphasis on structure, its heaviness, a certain "redundancy" and even pretentiousness.

However, when we say that Rachmaninoff was a pupil of Zverev or Siloti, or that he was influenced by one or another source, it must always be borne in mind that Rachmaninoff was primarily a creative artist whose evolution was not a matter of passing from one piano technique to another or from one method of using the pedals to another, but from one phase of artistic thinking to another. The medium in which he expressed his ideas was subordinated to the laws governing the development of the ideas themselves. In order to make this point even clearer, I shall adduce the following convincing proof:

Among Rachmaninoff's works without an opus number are two piano transcriptions of Fritz Kreisler's violin pieces *Liebesfreund* and *Liebeslied*, published by Schott in 1922

and 1923. They represent the first creative contact between Rachmaninoff and Kreisler and the beginning of Rachmaninoff's keen interest in Kreisler's violin technique. In 1932 he wrote his wonderful Variations on a Theme by Corelli (opus 42) which he dedicated to Fritz Kreisler. This dedication is not accidental, for these variations, particularly the amazing fourth, are really a transformation into piano technique of Kreisler's violin technique, his ornamentation, his flageolets. Does it follow from this that Kreisler "influenced" Rachmaninoff? The answer is both ves and no. Yes, in the technique of nuance. No—in the sense of creative evolution, for Variations on a Theme by Corelli is an independent work of Rachmaninoff's later years, a work profound in content and interesting in its use of the principle of variation.

Rachmaninoff's teachers of composition at the Conservatory, Arensky and Taneyev, were men of quite different character, scope and artistic tendencies. They shared one trait in common, however. This was their fidelity to Chaikovsky, Both Arensky and Taneyey merely deepened the spiritual affinity of their pupil to Chaikovsky. Arensky contributed both good and bad elements to Rachmaninoff's education. He taught him to regard the creative process as a revelation of heart and soul. He imbued Rachmaninoff with his own sincerity, warmth and poetic spirit (in particular, his sensitive appreciation of nature and Arensky's influence landscape). especially in Rachmaninoff's romances, in his sense of melody and in his love of declamation—a strong point with both the teacher and the pupil. The negative qualities of Arensky's school lay in the fact that the teacher, who was a master of chamber scope, with a bent for a "salon" type of music, was unable to develop Rachmaninoff's ability for music of large scope and symphonic breadth, an ability which was already evident in Rachmaninoff's early works. Rachmaninoff's opera Aleko is a very good case in point. Although this is a genuine production of Arensky's Conservatory school, the "claws of a lion cub" are already evident in it. It will suffice to recall the cavatina from this opera. The orchestral effects in the cavatina are permeated with specific Rachmaninoff emotions, the roots of which derive from Chaikovsky and not Arensky.

Arensky taught Rachmaninoff fugue and free composition, Taneyev counterpoint. Fugue

¹ Anton Grigorievich Rubinstein. Moscow, 1889.

is also counterpoint, of course, but since it was evolved on a proved, new harmonic base in the seventeenth and eighteenth centuries the old system of study at the Conservatory set it against the old style of counterpoint, the choral polyphony of the fifteenth and sixteenth centuries. Taneyev, who was an incomparable master of the Netherland School taught Rachmaninoff its great art of creating and developing melody and its polyphony.

Did Taneyev teach Rachmaninoff the art of Russian counterpoint? Tanevey tried to solve the problem placed before Russian music by Glinka. Among Taneyey's compositions is a rather curious work entitled A Netherland Fantasy on a Russian Theme, a twelve voice counterpoint for three sopranos, three altos, four tenors and two basses (the fantasy is dedicated to Laroche). The melody is without a text but is taken from Balakirev's Collection of Russian Folk Songs. It is a wedding song sung in Nizhegorod province. There are many such examples of Russian counterpoint in Tanevey's music and he based them both on Russian secular and church music.

It is generally thought that while Rachmaninoff had every respect for Tanevey's personal qualities and his musical tendencies he did not take these tendencies seriously, regarding them as archaic. This point of view, based on a superficial attitude toward both Taneyev and Rachmaninoff, fails to take into account two important circumstances. First of all Tanevev exerted a general and very profound influence on Rachmaninoff's musical style and did much to strengthen his credo in art—Progress on the basis of historical-musical traditions. Tanevev's influence was also apparent in specific aspects of Rachmaninoff's music. In an age of the preponderance of harmonic thought he opened Rachmaninoff's eyes to the artistic significance of melodic-linear thought. This influence was not immediately apparent in Rachmaninoff's creative work. His charming Six Songs for Female or Bous' voices (opus 15, 1895) were still far from the problems involved in Russian Counterpoint. Much later, in the period from 1910 to 1915, Rachmaninoff was brought face to face with these problems in creating The Liturgy of St. John Chrysostomus and Vesper Mass. Neither can we ignore the lessons to be found in the mastery of the a capella style which Rachmaninoff owed to Taneyev's teaching.

Mention may be made in passing of the existence of a piano piece called *Firetti* (Moderato, F Major) among Rachmaninoff's manuscripts. The piece is dated 4 Feb., 1899 and was an unpublished tribute of the composer to the contrapunctal style.

Rachmaninoff was eighteen when he graduated from the Moscow Conservatory with a brilliant record. Besides Aleko, he had already composed a number of works, both large and small. There is little or no evidence in these works of the line which his creative talent was to follow. It is hard to believe that Rachmaninoff composed the romance Ah, ye Cornfields (to words by A. K. Tolstoy), so little does it have in common with his melody and so far does its folklore admixture conflict with a free interpretation of Russian characteristics.¹

Another song of this period which is also not at all characteristic of Rachmaninoff, although it is good enough in itself, is his romance in the *Oriental* manner *Oh*, do not sing again (to words by Pushkin, op. 4, No. 4). Rachmaninoff evidently felt that the Oriental genre was not congenial to his spirit, for he subsequently very seldom turned to it, save for a few incidental compositions such as his *Oriental Sketch* for the piano (1938, without an opus number).

The Orient, as a theme, does not figure in Rachmaninoff's work. Oriental melodies. however, had entered so deeply into Russian classical music that Rachmaninoff as a Russian composer could not help absorbing this aspect of Russian music. Thus, although he rarely turned to the Orient for a theme or a subject, his music contains numerous episodes with more or less vivid Oriental colouring. One of the best examples of this Oriental colouring is the theme from the finale of Rachmaninoff's second piano concerto (Moderato). Many of us who remember the composer's vivid rendition of this glorious page of Russian music or who have heard his rendition in recordings, know how imposing this theme becomes in his playing. The roots of

¹ A hitherto unpublished draft of a song by Rachmaninoff entitled *Volga Boatman Song* was recently published. The manuscript of the score for voice with piano is the property of I. Shishov. The song is based on a theme from Y. Melgunov's volume of Russian songs.

this Oriental theme are not difficult to trace. They are found in Glinka's Ruslan.

The first three years following his graduation from the Conservatory (1893—1895) were very productive. There were no forebodings of the serious crisis which came suddenly in 1897 when his youthful hopes for an easy road to fame met with a decided rebuff.

In those first years Rachmaninoff wrote nine or ten opuses among which were many large symphonic and chamber compositions: his first symphony (opus 13, 1895), an orchestral fantasy *The Rock* (opus 7, 1893), *Trio Elégiaque* (opus 9, 1893), his first piano suite (*Fantasia*, opus 5, 1893), six songs (opus 8, 1893) and several other compositions. The first symphony occupied most of the composer's attention in this creative period.

He did not venture into the field of symphonic music at once, this symphony being his thirteenth opus. It followed a period of thorough experimentation in various fields, including that of writing for orchestra. The score of *The Rock* shows what mastery Rachmaninoff had attained in orchestral composition by that time. The only criticism to be made of this score is not that it shows the awkwardness of a novice but that, on the contrary, it betrays a certain excess of virtuosity, a striving after striking effects, the isolation of details in separate nuances.

There is reason to think that Rachmaninoff's first symphony is not a "pure" symphony but expresses certain literary-programme associations. According to S. Satina, the score of this symphony bears the same Biblical epigraph as does Tolstoy's *Anna Karenina*: "Vengeance belongeth to me, I will re-

compense saith the Lord."

It may be that in choosing this epigraph Rachmaninoff wanted to stress a certain philosophical and ethical connection between his symphony and Tolstoy's novel. If we lift the edge of the curtain for a glimpse of the young composer's spiritual world we see that it was an involved and agitated one. The eternal problems of human life, duty and happiness, the individual and the family, feeling and conscience—stirred Rachmaninoff to the depths of his being.

The fate of the first symphony was indeed profoundly dramatic. It had its first performance in St. Petersburg on March 18, 1892, with Glazunov as conductor. Its story may best be told in the following passage from Satina's memoirs: "Rachmaninoff placed great hopes on the symphony. Completely engrossed in its writing, he thought that he had discovered new musical paths... This makes it clear why the young composer, spoiled by his earlier successes, took the complete failure of this first performance so much to heart. Neither the public nor the critics liked the symphony. César Cui, for instance, wrote that if there were a conservatory in hell Rachmaninoff would undoubtedly be its star pupil! It is possible that given a better orchestra and another place (Moscow, for example, where Rachmaninoff was already something of a notable) the symphony would have met with a different reception. However that may be, the composer was bitterly disappointed. Many years later he related how he had hid on the stairway leading to the wings during the performance. There he sat, putting his hands over his ears at times to shut out the sounds that tormented him. He tried to understand what was wrong, where he had made his mistake." The mistake, evidently, was not that the orchestra played the wrong notes or played out of tune but that the music itself was utterly alien to Glazunov who had therefore failed to find the key to its proper interpretation.

There is ground to presume that the manuscript of this symphony is extant. It is most likely to be found in the archives of M. Belyaev in the Leningrad Public Library. A manuscript variant of the first movement of this symphony exists in Moscow as well as the composer's arrangement for four hands.¹

This was made while Rachmaninoff was at *Ivanovka*, the Satin's estate in Tambov Province, in 1898. The following is a description of the manuscript: Symphony D-minor, opus 13. 1) Allegro ma non troppo; 2) Allegro animato; 3) Larghetto; 4) Allegro con fuoco.

What has just been said is sufficient to understand the extreme importance attached to the manuscript of this symphony, still unavailable to researchers. If the composer deemed it necessary to arrange the whole score for four hands he evidently did not consider this child of his brain an absolute, hopeless failure.

¹ In the State Central Music Museum. The orchestral parts of all the movements have been found among those archives of M. Belyaev which were handed over to the Leningrad Conservatory.

What a terrible blow the public's ill reception of this symphony was to the composer! He, who had been so productive, stopped working and retired into seclusion to his wound. The mental depression which was expressed in his utter apathy ("he lay on the couch the whole day long in gloomy silence," writes Satina of this period) was soon aggravated by financial difficulties which came as an inevitable result. During these difficult years he was invited to take over the post of second conductor at Mamontov's opera theatre in Moscow, Rachmaninoff accepted this offer and from 1896 to 1898 he conducted Rusalka, Askold's Tomb, Rogneda, May Night, Carmen and Samson and Delilah.

His work in the theatre, especially at first, was a training period for Rachmaninoff. The repertory of those years did not offer him much opportunity to show his talent to the His association with the Mamontov Theatre brought him into contact with people he had never known before. One of these new acquaintances was Chaliapin. It was not long before a firm friendship was established between the composer and the singer, a friendship cemented by their work together and mutual taste. Rachmaninoff appreciated Chaliapin not only as a great singer with whom he worked and appeared in concerts that were outstanding events in Moscow's musical life, but also as a man of keen intellect, observation and humour.

Getting a little ahead of our story, it may be noted here that from the Mamontov Theatre Rachmaninoff went to the Moscow Imperial Theatre where he conducted for two years, from 1904 to 1906. There he conducted eighty-nine performances, including the following operas: Life for the Tsar, Rusalka, Boris Godunov, Prince Igor, Evgeny Onegin, The Queen of Spades, Oprichnik, Pan Voyevoda, and three of his own operas: Aleko, Francesca da Rimini and The Covetous Knight.

Rachmaninoff's work in the Bolshoy Theatre was like a current of fresh air in the stagnant, official atmosphere that prevailed in the theatre of that day. It must not be forgotten that those were years of the rapid growth of a critical spirit in Russian society following the military disaster of 1904 and the events of 1905. Although Rachmaninoff became the leader of the opera "opposition" against his will, he carried out this mission

willingly and competently. The years that he wielded the baton at the Bolshoy Theatre marked the musical culmination of prerevolutionary Moscow opera. His career at the Theatre, however, was relatively short. Believing in his calling as composer, Rachmaninoff could not neglect his real work for that of conductor or pianist.

These same years mark the beginning of his fame abroad both as composer and pianist. In 1899¹ he appeared in London where he conducted his own composition The Rock and played his piano compositions including the ever popular C-Minor prelude. In the beginning of the 1900's he gave a concert in Vienna. It must be noted that in those early years Rachmaninoff saved his time and efforts for creative work, spending them sparingly on concerts in comparison with the latter years of his life abroad when he gave practically all of his time to concerts, with brief intervals for composing. Even in these years, however, Rachmaninoff made frequent appearances on the concert stage in Moscow, St. Petersburg, and in the provinces, including Baku.

One of his most famous concerts was that in Moscow on 2 December, 1900, with a symphony orchestra conducted by Alexander Siloti. Rachmaninoff performed the last two movements of his second piano concerto at this concert and met with overwhelming success. The first movement was written later, in 1901, and the entire concerto was first performed by the composer in Moscow on 27 Oct., 1901.

Splendid as the second and third movements of the second piano concerto are, the first Moderato movement, which was written independently of the others, is especially remarkable. It dominates over the other movements and is actually a concerto in itself. It is a poem to life, heralding the end of a long crisis and the beginning of a new, productive period in the composer's career.

Rachmaninoff was now twenty-eight years old. He was nearing the "middle of the road" and reaching the end of the "early period." We see a mature artist, writing, as before, in various forms. Beginning with the smaller forms the list includes piano preludes (opus 23, ten preludes, among which was the de-

¹ This is the date given by Satina in her Memoirs. Belyaev, in his brochure Serge Rachmaninoff, Moscow, 1924, gives 1898.

servedly popular Prelude in G-Minor, one of the most courageous compositions of this courageous composer), songs (opus 21, twelve songs, including the lovely The Lilacs). Among the larger forms were instrumental and instrumental-vocal compositions. Besides the second piano concerto, Rachmaninoff wrote a violoncello sonata during these years. This sonata (opus 19, 1901), was dedicated to the well known cellist A. Brandukov, a friend of Chaikovsky. The sonata was written at the same time as the second piano concerto. The sonata is an intimate composition. Its restrained style reveals all the inexplicable subtlety of the composer's spiritual world, the warmth of his heart. A lyrical mood prevails throughout the score of this sonata. The simplicity and poesy of the music is amazing.

At the beginning of 1902 Rachmaninoff finished his cantata *Spring* (opus 20) written to Nekrasov's poem *Murmuring Green*.

This remarkable work, which was written in 1902¹, in many ways anticipates the style of *The Covetous Knight* and *Francesca da Rimini*, which appeared in 1904 and 1905. Like these operas, *Spring* was an experiment in Rachmaninoff's creative development.

It was a bold experiment, marking a turning point in Rachmaninoff's creative method. The melodic principle in the vocal parts are replaced by declamation, and although certain intonations give an impression of musical melody these are only suggestions which never develop into the plastic, smooth melody which is so characteristic of Rachmaninoff. The chorus merely "exclaims" while the solist narrates, this moreover being in the Russian folklore style which is so unlike Rachmaninoff's usual music and is so unconvincing in this score. Between Nekrasov's Murmuring Green and Rachmaninoff's Spring there lies that world of difference which separated the spiritual atmosphere of the sixties from that of the nineties of the nineteenth century. The change was not limited to the replacement of the melodic principle by that of declamation. It was also apparent in the fact that the light accompaniment of the vocal parts characteristic of Rachmaninoff's early opera Aleko here attains the significance of an independent orchestral part.

The piano score of *Spring* gives only a remote impression of the rich, full-toned score with its abundance of fine detail. The vocal parts are drowned out by the orchestra or else become an ingredient of a general mass of sounds. The music is built up on a succession of "moods" for the interpretation of which the composer depended upon basic harmony and the timbre of the various instruments. There are departures (fortunately not many) from the principle of thematic content, which show the main line along which Rachmaninoff's creative talent was to develop.

It is rather difficult to describe why it was that Rachmaninoff broke away from the music of intellectual content to music of moods in the cantata and in both his later operas. In general the matter may be explained in the following way:

The musical atmosphere of the 1900's involved a departure from the creative principles of the nineteenth century, from the principles of classical music and romanticism. French impressionism, Italian verism and the post-Wagner tendencies in Germany were all an expression of and at the same time a reason for the profound stylistic changes in musical art. Other important factors were the repercussions of tendencies toward reform in Moussorgsky and to an even further extent in Dargomyzhsky (The Stone Guest).

The success which this music of moods met with naturally transferred the centre of attention to literary and visual-plastic associations. There was an increasing interest in literary-poetic images of philosophical aesthetic themes or finally to *pictures* of one kind or another.

In view of all this, the appearance of such works as Rachmaninoff's *The Covetous Knight* and *Francesca da Rimini* become comprehensible from the historical and stylistic point of view. These operas were both written during Rachmaninoff's activity as a "conductor-reformer" at the Bolshoy Theatre where both operas had their premiere in a single evening, 24 January, 1906.

These operas present a vivid contrast to the classical Russian operas which the composer conducted at the Bolshoy Theatre (Life for the Tsar, Rusalka, Boris Godunov, Prince Igor, Evgeny Onegin, The Queen of Spades

¹ There is a copy of the score of this cantata in the Moscow Conservatory with the inscription "To my former teacher, dear Anton Arensky, from the composer. January 18, 1902." This is clear proof that it could not have been composed between January and March as Belyaev claims in his brochure.

etc.). Both of them were short (the Italian principle, if we recall Puccini's one-act operas Suor Angelica, and Gianni Schicchi). They can be broken up into separate pictures (compare the "pictorial quality" of Debussy's Mélisande). The declamatory et principle in the vocal parts, the leading role assigned to the orchestra are especially apparent in The Covetous Knight, based on Pushkin's poem of the same name. Francesca da Rimini contains substantial concessions to the melodic principle. The music of this opera, especially in the scenes between Malatestino and Francesca or the meeting of Francesca and Paolo is most impressive.

This whole group of compositions (Spring, The Covetous Knight and Francesca da Rimini) were important experimental phases in the composer's career that enriched his technique of composition without, however, limiting his subsequent work to a single trend. Rachmaninoff never became a Wagnerian, though it is unquestionably true that the principles of Wagner's dramatic music exerted a strong influence on him when he was composing Francesca da Rimini. It was not a matter of Wagner alone, however, but of the entire trend of European and Russian music in the 1900's, particularly in the early

years of the decade.

In going abroad for a protracted stay that lasted from 1906 to 1909, Rachmaninoff had another purpose besides that of escaping the administrative cares that his position as theatre conductor involved. He sought the concentration of thought and feeling made necessary by the agitation resulting from his experiments. He was anxious to progress from the one-sidedness of all these experiments to organic, profound work. Settling down in Dresden, Rachmaninoff began to work on a number of large compositions among which were The Isle of the Dead (opus 29, 1909), the second symphony (opus 27, 1907), the first piano sonata (opus 28, 1907), and the third piano concerto (opus 30). Thus from the thesis—the Rachmaninoff of the early years—and the antithesis the Rachmaninoff of the years of experimentation—there was born a synthesis. Among the works of this period are some of the best compositions the composer ever wrote. Although there is a close affinity between the Rachmaninoff of the second piano concerto and the Rachmaninoff of the third piano

concerto, the third concerto is undoubtedly a landmark in the composer's musical development. The distinction is best defined by the fact that a more truly classical element now appeared in the underlying romanticism of Rachmaninoff's style. It will suffice to contrast the romantic "exaltation" of the first chords of the Moderato in the second concerto with the utter simplicity which so captivates the listener in the third concerto. The sustained melody with which the third concerto begins is a genuine Rachmaninoff melody, with all the specific qualities which that implies, expressed in extremely simple and natural terms. Is this not the most valuable and the most difficult thing in the art of music? Such simple, unaffected melodies prove to have the most vitality and stamina in regard to time.

One would like to call Rachmaninoff's second symphony, "Russian lyrical symphony," so simple and intimate are its themes and so naturally and easily do they develop. What is lacking in the score, however, is a touch of improvisation. The symphony is classical in its remarkable thematic coherence. In this respect Rachmaninoff here shows the beneficial influence of the school of Taneyev and Chaikovsky.

The beginning of 1910 found Rachmaninoff back in Moscow. We must now sum up the achievements of practically the whole decade that passed before Rachmaninoff left Russia for good in 1917, never to return alive. We say "alive" because there is reason to think that on his deathbed Rachmaninoff expressed a desire that after the war his body be interred in the Novodevichy Convent cemetery which is the last resting place of many people whom he loved and esteemed, beginning with Chekhov and ending with Scriabin, his Conservatory classmate.

Rachmaninoff's wonderful nature, the nature of a great Russian artist, is revealed in his correspondence with Marietta Shaginyan, a Russian writer. These letters show how unassuming, tactful and sensitive he was. These are traits of true aristocracy of spirit to which everything mean and petty, vulgar and smug, is utterly alien.

While taking an active part in the musical life of pre-revolutionary Moscow, Rachmaninoff was at the same time a lone figure in this intensive, intellectual atmosphere. He was acutely aware that despite his wide-

spread success both in Russia and abroad he still did not occupy the position he deserved in the music world.

It was not that Rachmaninoff lacked faith in the correctness of the path he had chosen, but that despite this faith, he saw that this path was not the one along which Russian and West European music was developing. With all his outward success the realisation of his isolation as an artist impelled him to shrink from people and retire into his own inner world.

Hence the singular nature of Rachmaninoff's life. After emerging from one crisis in his creative career at the end of the nineteenth and the beginning of the twentieth century he again succumbed to tormenting doubts in the years preceding the revolution. There was another prolonged period which did not end, as did the first, with a renewal of his creative forces but was cut short by his leaving for abroad at the end of November 1917. If, moreover, his brilliant creative period from 1901 to 1909 (from opus 17 to opus 30, all large works) is compared to the period from 1909 to 1917 a quantitative decrease will be noticed (from opus 31 to opus 39). The works of the latter period are mostly small compositions. Rachmaninoff was nearly forty-five when he left Russia. It was much too early to speak of a natural decline in his creative energy, and Rachmaninoff himself showed what stores of energy were still unexpended in his creative talent.

What were the creative achievements of the pre-revolutionary period, from 1910 to 1917? The list includes the thirteen preludes (opus 32, 1910), six Etudes Tableaux (opus 33, 1911), nine Etudes Tableaux (opus 39, 1916—1917), all for the piano. Besides these there were fourteen songs (opus 34, 1912— 1915) and six songs (opus 38, 1916). Along these numerous instrumental vocal compositions in small forms, the only large works of this period were The Bells, a choral symphony (opus 35, 1913), the second sonata for piano (opus 36, 1913) and finally two cycles of church choral music—The Liturgy of St. John Chrysostomus (opus 31, 1910) and the Vesper Mass (opus 37, 1915).

What do these works show? First of all that Rachmaninoff was again placing the emphasis on small instrumental and vocal forms which reflected his meditations and moods, thoughts and emotional states. Like Chopin's Preludes and Mazurka, Rachmaninoff's Preludes and Etudes Tableaux were a sort of intimate diary in which the composer entered his musical observations and emotional experiences. What an extraordinary wealth and variety of texture, of possibilities and technical ingenuity! Written in the years when Scriabin was making rapid progress in forming the style in which he strove to acquire a certain non-reality and avoid, so to speak, the very "resonance" of the keyboard, the Preludes and the Etudes Tableaux show Rachmaninoff as a composer deeply drawn to all the vital beauty of romanticism. Rachmaninoff was not marking time, however. His musical thought became more profound while the form of his music became more classical, purer and more severe, improving in power of expression. The Etudes Tableaux (opus 39) mark the culminating point of this process.

The series of fourteen songs (opus 34) contains numerous masterpieces in this genre. One of these is the famous *Vocalise*, dedicated to the singer Antonina Nezhdanova. It is really a work of genius, a most refreshing page in Russian lyrics. This song may easily be placed on a par with Prokofieff's best work in this genre.

A particular place in Rachmaninoff's music of this period is occupied by his Six Songs (opus 38) written to words by contemporary poets, among whom were Blok, Bryusov, Biely and Sologub. Poetry has repeatedly exerted a powerful influence on music. It will suffice to recall the tremendous influence which the romantic poets of the early nineteenth century had on the musicians of the romantic school, for instance Heine on Schumann. Although this influence was not so great in the case of Rachmaninoff it was nevertheless strong enough to be noticed. We cannot conjecture as to what direction Rachmaninoff's lyrical compositions might have taken after the Six Songs, as this song cycle, written in the composer's native country, was the last one he ever wrote. During his subsequent life abroad Rachmaninoff never once returned to song writing.

In some ways the Six Songs were a turning point. Although Rachmaninoff did not break with his characteristic song style in the sense of the "flowing quality" of the vocal part and the plasticity of the piano accompaniment, this accompaniment goes be-

yond the intimate, chamber style in some of the songs and acquires traits of symphony music. It is no mere coincidence that the instrumental accompaniment to *Dreams* is one of the longest in all music of this genre. But this was not the most important thing. The main change was in a certain alteration in the whole means of expression. In such a song as *To Her* (words by Andrey Biely) every aspect of the music is specifically Rachmaninoff's—the angular vocal line, the harmonic innovations, and the rhythmic agitation and restlessness. There is no doubt that the composer was influenced by "modernism" in this song.

One of the compositions of his pre-revolutionary years which Rachmaninoff himself especially liked was his cantata The Bells for chorus with orchestra. This was based on Constantin Balmont's translation of Edgar Allan Poe's poem. In my opinion it will not be presuming too much to say that the pealing of bells—now rallying, now rejoicing, now mourning, had deeply impressed the composer in early childhood. An early reflection of this childhood impression is evident in his first piano concerto. In my opinion it was this childhood impression together with Poe's poem that prompted him to write this four-movement choral symphony, one of the most remarkable of all Rachmaninoff's works.

This Cantata represents the powerful and at the same time pessimistic conclusion to which Rachmaninoff was led by his meditations on human destiny. Even earlier, during the crisis he had experienced at the turn of the century, he had expressed these same gloomy ideas in his song *Fate* written to words by Apukhtin and dedicated to Chaliapin (opus 21, No. 1). In the cantata we again meet the idea of fate, the inevitable destiny of solitary, human existence.

Such are the general traits of Rachmaninoff's work in the period from 1910 to 1917. The work accomplished in these years includes several outstanding achievements, but as a whole there is a definite impression of heterogeneity, even a certain haphazardness in the choice of one or another genre. The composer was evidently seeking a new path but had not yet found it. Was he eager to find this path? He was, beyond a doubt. Convincing proof of this is found in Rachmaninoff's later songs, particularly opus 34, which contains come splendid compositions. The best examples are the two songs dedicated to Chaliapin: The Raising of Lazarus to words by Khomyakov and Obrochnik to words by Fete. Both songs represent a thematic departure from Rachmaninoff's usual "lyrics of the heart." They are hymns in honour of great deeds, fortitude and sacrifice.

Such was Rachmaninoff's creative work on the eve of the historical events that took place in 1917. Toward the end of November of that year he accepted an invitation to give a concert in Stockholm and left for Sweden with his family.

The recent memoirs published by S. Satina contain an account of an interview with the composer on the subject of his reason for leaving Russia and going abroad. The composer assumed that there would be no place for artistic work under the new regime in Russia. Later, during World War II, when Rachmaninoff found that a common language and common feelings linked him to us, he was overjoyed to see there was and is a place for his art in our music. Before his death he became acquainted with the many editions of his music which have appeared in the Soviet Union since 1917.

Most of Rachmaninoff's life abroad was spent in the United States where he made numerous concert tours. He crossed the ocean repeatedly, both for concert engagements and for pleasure trips.

The most important fact in this period of Rachmaninoff's life is the ten year break in his creative work. Such a lengthy pause can be only partially explained by his colossal activity as pianist and conductor to which he devoted his time and effort with all the conscientiousness of a professional.

We who heard Rachmaninoff's playing before he left Russia to live abroad cherish the precious memory of the lofty artistic content which was its outstanding merit. Listening to him play, there was no time to think of such things as the pure piano quality of its sound, of finger technique, of his use of pedals. True, Rachmaninoff's piano compositions speak more eloquently of his style of playing than do any words, which is equally true of Field, Liszt, and Scriabin. His piano concertos are of course the best testimony of Rachmaninoff's piano technique. In them his talent as a pianist is expressed to the fullest extent.

Today, when we hear Rachmaninoff's second and third concertos in recordings of the great artist's rendition, new impressions are added to the old. The ear involuntarily listens to the technique of rendition and notes a certain new quality. It evidently stems not only from an inner maturity and not only from stylistic changes—from the romantic to the classical spirit—but even more from the tremendous practice of almost uninterrupted concert tours. Rachmaninoff's playing in his later years is amazing in its extraordinary energetic elasticity. It is playing of the utmost concentration, devoid of any pseudo-romantic flabbiness or sentimental weaknesses.

However, when one thinks at what cost this colossal technical progress was attained, when one remembers that ten years elapsed between Rachmaninoff's departure from Russia in 1917 and the appearance of his first composition written abroad, his fourth piano concerto (opus 40, 1927), one cannot help but feel a twinge of pain. There is ground to assume, moreover (according to a statement by C. Igumnov) that this fourth concerto was begun before Rachmaninoff left Russia. In 1938 the composer published a revised version of this concerto. It is dedicated to N. Metner. a fact which also links it with Moscow associations. It may be said, therefore, that Rachmaninoff resumed his work as a composer only with opus 41, Three Russian Folksongs for Chorus with Orchestra (1928).

Even these Three Songs were a relatively unimportant episode in the composer's creative career. It was only in the beginning of the 1930's that Rachmaninoff appeared as a composer of monumental forms with his Variations on a theme by Corelli for piano solo (opus 42, 1932) and his Rhapsody on a theme by Paganini for piano with orchestra (opus 43, 1934). This makes quite clear the long years in which Rachmaninoff did no composing at all. The bitterness of this realisation is only partially moderated by the fact that the few things which Rachmaninoff wrote in his last years were of the same high calibre as those of the early 1900's and showed his superb talent at its best.

The memoirs of S. Satina paint a sorry picture of Rachmaninoff's life at this period. We see him at a railway station waiting for a train, guarded from the curious, as always, by his faithful companion and wife, Natalia. Both try to elude the persistent photograph-

ers and reporters who follow them everywhere. One of the photographers, however, manages to get a picture of Rachmaninoff holding his hands over his face. The next day the photograph appears in the local newspaper with the caption "the hands that are worth a million dollars." The photographer and the editors had in mind, of course, the value of these hands from the point of view of piano playing. But for us these hands are even dearer as the hands which have written many, many pages of music which have already taken their place among Russian classics.

It is not convincing to blame Rachmaninoff's concert activities for so long an interruption of his composing. We have seen how slowly the composer made his comeback after a crisis even in his early years. After the failure of the first symphony more than four years passed (1897—1901) before his creative energy was fully restored.

Rachmaninoff was profoundly moved by his separation from his beloved country, its landscape, its way of life and its people. The wound took a long time to heal. It is commonly thought that once it had healed, Rachmaninoff returned to composing, seeping himself, so to speak, in memories of the people and country he had loved so well. His later compositions, however, are interesting precisely because they testify to the beginning of a new phase in his creative work and not at all because they are revivals of past musical style in a composer whose spiritual and physical strength has become feeble (recall the later opuses of Schumann and Grieg which betray such stylistic revivals).

What was the source of energy for this regeneration of Rachmaninoff's powers? S. Satina devotes some vivid pages of her memoirs to this. She describes Rachmaninoff as ardently and indefatigably interested in everything going on in his native land, in far off Soviet Russia. He bent every effort to maintain contact with his native Russian culture. Whether he was in America or on one of his frequent continental tours, he always made a point of keeping up with the latest books published in Russia, interested, as always, in fiction, historical works and memoirs. His correspondence with friends in Russia contains abundant proof of his love for country, his ardent and complete faith in

its national forces. Rachmaninoff became more and more convinced that the Revolution meant the creation of a new Russian culture by the efforts of the people themselves. With this realisation came an increasing renewal of his creative energy. Thus the long pause in his creative career drew to an end and provided the conditions requisite for a new creative upsurge.

His piano variations on the theme of Corelli's fourteenth violin sonata, from opus 5, is extremely interesting both in form and content. This is the famous Spanish song La Folia about the overwhelming love which fills a poor maiden's heart, a forbidden love since its object is a member of the church who has taken the oath of celibacy. The variations themselves are of a curious form. By introducing the Intermezzo between the thirteenth and fourteenth variations, they acquire a certain tonal duality. Beginning with the fourteenth variation the D-minor theme is transformed into a D flat major theme. This is only a temporary "flash," however, and the D-minor key is re-asserted in the sixteenth. The final variation called the "coda," written as a free variation, supplies a marvelous ending to the composition.

In general the variation form played an important role in Rachmaninoff's work, beginning with his early variations on a theme by Chopin (opus 22, 1903) and ending with his remarkable variations for piano with orchestra entitled Rapsodie on a Theme by Paganini (opus 43, 1934). In calling these variations a Rapsodie Rachmaninoff, in my opinion, wanted to emphasize the unity of the musical conception in this work. These are indeed symphonic variations. Unity of conception is attained not only by the unity of symphonic spirit, but also by the amazing coordination of the piano and the orchestra. There is no overburdening of score, nor are there any bombastic effects. Everything is done in moderation, everything is lucid but never dry, with a marvelous use of instru-

Parallel with this Rapsodie, Rachmaninoff worked on his wonderful Russian Rapsodie, his third symphony. We know very little about how this symphony was written. The only thing we are certain of is that it was begun in the summer of 1935. It had its first performance on 6 November, 1936 by the

Philadelphia Symphony Orchestra with Stokowski conducting. Rachmaninoff wrote the symphony without interrupting his concert activities. He had very little time in which to make corrections in the voice parts and the orchestral score.

Rachmaninoff shows himself a virtuoso in the orchestral writing of this third symphony. Elements of "concert music" are apparent here and there, in the very beginning of the symphony, for instance when, after the slow introduction based on an old Russian refrain, the orchestra bursts forth like a pianist beginning the passages of his solo. I should not like to give the impression, however, that Rachmaninoff was merely orchestrating what was essentially a piano composition. The third symphony is the creation of a great master of orchestral composition.

In this symphony, the impressive epilogue to his creative career, Rachmaninoff again demonstrated how inexhaustible was his talent for melody. It will suffice to refer to the main theme of the second movement. This is one of the greatest of Rachmaninoff themes for its vigor and its genuine Russian character. Yes, this is a Russian, national melody, despite its chromatic structure.

The writing of the third symphony, so amazingly fresh and vigorous, in 1935-1936, only a few years before the war, shows to what an extent the composer linked his creative progress with the spiritual growth of his own people. During the years of World War II Rachmaninoff returned in spirit When the Germans to his native country. hurled their armies against the Russian land, Rachmaninoff suffered like every loval son of his country. He took our temporary reverses very much to heart, protested against the defeat tendencies of certain groups in the Russian colony and against the underestimation of events on the part of some Americans. Despite the protests of those close to him, Rachmaninoff insisted on turning over the receipts of one of his New York concerts to a fund to aid the Russian Army and had notices to this effect printed on the programme. In her memoirs, S. Satina mentions that this created a tremendous impression.

In 1942 Rachmaninoff wrote his last opus— Symphonic Dances,

It is remarkable that Rachmaninoff, who so rarely turned to musical-choreographic genres, should devote his last opus to dance forms. I attribute this to the composer's desire to express the essence of rhythmic principle, to express life in motion. These Dances are the work of an artist who has reached an age when motor impulse as such is already on the decrease, when he begins to look upon inactivity as a haven of rest after a stormtossed life and not as an unpleasant necessity. These Dances are a musical generalisation of the very principle of motion and not its elemental, irrepressible emanation.

The Dances are amazing for the same objectivity which characterised Beethoven's later sonatas and Bach's Art of Fugue. This is the wisdom that comes with years. The composer wants to share his experience and his philosophical system with his listeners. The impulsiveness and passion that characterised Rachmaninoff in his earlier period would have been inappropriate here. Objectivity, however, does not necessarily imply an absence of feeling. There is warmth and glowing feeling in the Dances but there are few traces of lyrical emotionality, except for rare exceptions such as the Molto Expressivo in the first movement.

The singular character of this work is most strikingly shown in the musical material itself. We still know very little about Rachmaninoff's musical interests in the latter period of his life. The very existence, however, of such works as the Variations on a Theme by Corelli among his compositions shows us that Rachmaninoff was interested in the art of the seventeenth and eighteenth centuries. It was just at that time that the generalised conception of the world found expression in music, in an endeavour to acquire a short, expressive motif, a musical "monad," which could serve as a basis for a musical structure of any form and difficulty.

This work is a symphony in three movements. I take it upon myself to term the first movement *Toccata*. It warrants this term not only because of the baroque melodic and rhythmic qualities but also because of the steady insistence of the main motifs with their characteristic accentuation.

The composer himself described the second movement as being in a "waltz tempo." It is slow and at times very lilting (molto cantabile), save for the ominous fanfare with which the waltz begins. This contrast is particularly striking in a scene that is still serene but in which there is already a foreboding of the storm to come. The storm is still far away but it is drawing ever nearer.

The main thematic material in the Finale of The Dances is based on a refrain resembling the medieval hymn Dies Irae (The Day of Judgement). The origin of this refrain must not be sought in the Gregorian chant but in old Russian music. The Finale paints a picture of stern, tense emotions, relieved from time to time by a mournful softening of the severity. Only at the very end of the Finale is there a rift in the clouds that overcast the horizon.

According to comments in the American press, the composer originally entitled the three movements of these *Symphonic Dances* as *Morning, Afternoon*, and *Evening*. He later rejected these titles, evidently to avoid any suggestion of programme music or autobiographical interpretations in a work so generalised and so impersonal in plan and scope.

The Symphonic Dances form a worthy epilogue to Rachmaninoff's life. They express the most essential traits of his creative personality—his unswerving aspiration toward large symphonic forms, his ability to rise to great philosophical heights in his artistic conceptions, his invariably progressive musical idiom, which was inseverably linked with the wholesome traits of Russian and world classics. It is precisely for this reason that we value and appreciate Rachmaninoff's work as something that harmonized with the great events of the present day.

ISAAC LEVITAN

1861-1900

By Tatyana Kovalenskaya

I SAAC LEVITAN was born in 1861 in the village of Kibarti, not far from the town of Berzhbolovo, which was situated on a railway. His father, who was a Jew, was a minor employee on the railway but later gave up this position and took his family to Moscow where he made a living by giving private lessons. In Moscow the family fell into straitened circumstances which became much more acute after the death of the parents, a misfortune which took place soon after the family moved to Moscow.

These difficulties, however, did not discourage Levitan from choosing the career of an artist. The first eleven years of his childhood were the only years of his whole life that were not connected with art. From the age of twelve, when he applied for admission to the Moscow School of Painting, Sculpture Architecture, Levitan's life was inseparably bound up with art. Among Levitan's teachers at the School were Perov, Pryanishnikov, Evgraph Sorokin, V. Makovsky, Polenov, and Savrasov. The latter was perhaps the one who most influenced Levitan. Levitan always recalled Savrasov with particular affection and gratitude. artists were all representatives of the older generation of the peredvizhniki1. They had borne the brunt of the struggle against academic traditions and blazed the trail for a realistic art, freed of conventionalities.

The period of the 1870's, which covers most of Levitan's student years, was extremely significant in the development of Russian realism. It was just at this time that the task of creating an independent national art conforming to the interests of the people was being formulated into a definite artistic creed by Kramskoy and Stasov, the theoreticians of the peredvizhniki. Thanks to this.

the efforts of individual realists in art, heretofore disunited, acquired a common theoretical basis and were consolidated into a single, powerful tendency in art. This tendency took a firm hold on progressive public opinion, won predominance in art circles and deprived the Academy of its privileged position as the main channel for the development of Russian art.

Although Levitan's teachers and predecessors passionately rebelled against the Academy and shoved it to be a stringhold of reactionary principles in art, they had themselves been reared under its hegemony. It was therefore natural that their own creative method, particularly at the outset of their careers, should still bear traces of academism. The task of overcoming the conventionality and schematism of their artistic language was one of the most important of all those confronting the artists of the 1870's. They chose the only correct solution—the study of real life.

This explains why the young Levitan with his passionate love for nature and his eagerness to fathom its secrets should have received such hearty support from his teachers. His talent developed in harmony with the prevailing tendency in art and not in opposition to it. In this Levitan was more fortunate than his predecessors. Notwithstanding these fortuitous circumstances, Levitan had his full share of difficulties, of which we shall speak later.

Although the art of the 1870's was unmistakably democratic and progressive in its main tendencies, it also showed signs of inner contradictions. These had their origin in the reaction which followed the revolutionary upsurge of the 'sixties. The broad-minded and inspired thought which had led the finest representatives of the 1860's to brilliant socialist conceptions now gave way to positivism, restricting the possibilities of perception to a registration of petty facts observed in everyday life.

¹ The name used for artists who took part in the peredvizhnyi vystavki (travelling exhibitions) inaugurated by the democratic-minded intellectuals in the third quarter of the nineteenth century.

The study of real life from such a standpoint led the *peredvizhniki* of the 1870's to a point where their realism showed signs of becoming narrow and incomplete. Some of the work of this period showed the unmistakable influence of naturalistic tendencies.

This was true of all forms of art in the 1870's, landscape painting being no exception to the general rule. Shishkin's work, especially that of his earlier period, bears clear traces of a limited, prosaic attitude toward nature. Notwithstanding this, he played a tremendously important role in portraying the Russian national landscape in painting. We owe it to his efforts that the Russian landscape finally received full rights of citizenship in art and superseded the alien style insistently propagated by the Academy. Thanks to Shishkin, landscape painting acquired all the qualities proper to an independent genre of painting. Although he was the first to show artists the wealth of poesy in the Russian landscape, Shishkin was prevented by the prosaic attitude of which we have already spoken, revealing the whole beauty of the Russian landscape in his own work.

In order to attain poetic heights it was necessary for the artist to synthesize the conceptions of reality and to depict all the multiformity and richness of real life in typical images that charm by their very truthfulness.

The greatest realists of the 1870's were acutely aware of the shortcomings in the realism they professed. This was evident, for instance, in Kramskoy's criticism of Shishkin's work.

Kramskoy went into raptures over the work of the young landscape painter Vasilev in whose paintings he detected the poetic quality so wanting in Shishkin's landscapes.

True, Russian realism did not reach its zenith until the following period in the art of Repin, Surikov and Levitan, representatives of the new generation of young artists. But even in the works of their predecessors we already see the beginning of a more profound and comprehensive grasp of reality. Mention must be made here of the role played by Savrasov in the sphere of landscape painting.

Savrasov succeeded in retaining and further developing the attitude toward the Russian landscape first evidenced in the work of Perov, the finest master of the 1860's. In Perov's paintings landscape possessed no intrinsic significance. The artist's attention was



Levitan—Self-portrait (watercolor)

focussed on facts of social life. In using landscape, however, as a means of heightening the expressiveness of his themes, as in A Peasant's Funeral and At the Last Tavern Perov perceived the profound emotional content of the ordinary Russian landscape. The artists who came after him began to turn from the cloying beauty of decorative panoramas, fantastic sunsets and romantic ruins.

It must be repeated, however, that Perov was not primarily a landscape painter. His depictions of nature were merely incidental elements of his compositions, secondary themes subordinated to the main idea.

For this reason we may say that Savrasov was the first Russian artist to discover the charm and poetry of the Russian landscape. Herein lies the significance of his first picture *The Rooks Are Back*, which marked a turning point in Russian landscape painting.

Savrasov was Levitan's teacher. He showed his pupil what creative joy the artist can find in every manifestation of nature, however insignificant it may seem. Under the guidance of Savrasov and later of Polenov, Levitan came to understand and love the intimate life of nature at the very outset of his artistic career. This enabled him in his later and mature years to create magnificent, generalised pictures of the Russian landscape.

Levitan's early works show the influence of a number of Russian lanscape painters, among them Shishkin, Vasilev and Polenov. The artist who influenced him most, however, was undoubtedly Savrasov.

His assimilation of these influences shows how close were the ties that linked Levitan with the art of the preceding period. His two pictures Evening and Autumn, A Village Road, painted in 1877, are especially indicative of this. In these pictures the national landscape is still inseparably connected with the Russian village which the artist depicts from the traditional point of view held by the peredvizhniki. In order to show the poverty of village life, Levitan paints dirty streets filled with mud puddles, figures of beggars, dilapidated houses and ugly fences. The sense of oppressive hopeless despair and desolation is made all the more acute by the dismal grev sky and the gaunt, bare trees. There is already a vital sense of reality in these youthful works by Levitan, although the expressiveness of the image is determined almost entirely by the theme.

In his subsequent works Levitan followed Savrasov in lending his subjects a lyrical interpretation.

Levitan was already a mature artist long before he finished his studies at the Moscow Art School. In 1879 his picture An Autumn



Landscape

day in Sokolniki was shown at the 2nd Student Exhibition held at the School. In this picture he had already completely freed himself of all extraneous influences. painting depicts a deserted path in Sokolniki park down which a solitary woman is walking on a dismal autumn morning. The whole subject is so simple that it can be described in these few words. But no words can convey the feeling expressed by the artist. The effect of the picture goes far beyond the limits of the subject and is a matter of moods and associations aroused in the spectator. The picture arouses the poignant melancholy evoked by solitude, the sadness of falling leaves and fading flowers. At the same time it impels the spectator to appreciate its solemn and stern beauty. One cannot but be amazed at the profound poetic interpretation given by the eighteen-year old Levitan to the subject he chose.

Pavel Tretyakov, who was one of the best judges of Russian art, was attracted to Levitan's picture at once and purchased it for his gallery.

Artists who had already made a name for themselves, to say nothing of one at the very outset of his career, considered it a great honour to have their works acquired by Tretyakov for his famous gallery. Tretyakov's purchase of Levitan's picture at once placed the young artist in the first ranks of his profession. It must be noted that the critics were also favourable in their comments on Levitan's paintings, stressing his profound feeling for nature. His art was, nevertheless, not completely understood and failed to win unreserved recognition from his older contemporaries. This is probably the real explanation of the conflict that ensued between Levitan and the School administration when he finished his studies.

After having twice received the so-called Small-Silver Medal for drawings and sketches in 1881 and 1882, Levitan submitted a picture for the Large Silver Medal and the title of Approved Artist. He was, however, unsuccessful. His picture was not even accepted.

Some critics claim that the reasons for this failure had nothing to do with Levitan or with art. It is far nearer the truth, how-

¹ Cf. the essay by I. Grabar and S. Glagol on Levitan.



Spring Floods

ever, to assume that this was the first outward manifestation of the conflict between Levitan and the older generation of artists. He was subsequently often criticised for the "incompleteness" and sketchiness of his pictures. Once he even had to repaint his pic-

ture called *The First Foliage* to meet the requirements set down by the administration of the *peredvizhniki* exhibitions.

In all probability Levitan's free style of painting was regarded by his teachers as an indication of lack of maturity.

After this failure, Levitan made no further attempt to obtain the title which was his by right. In 1884 he left the School with a certificate that he had finished the course.

His first independent productions date to the beginning of the 1880's. The reaction which had set in early in the preceding decade became more intense in the 1880's. During these same years the democratic movement headed by the narodniki also went down in defeat.

In art, the spirit of reaction found expression in a sceptical attitude toward everything that smacked of revolutionary struggle, in a denial of the necessity of propagandising the revolutionary struggle and in an appeal for pure art. This was a creed leading in the long run to estheticism and formalism. In the 1880's reaction expressed itself in a revival of academic art which differed, however, from the old academism.

Many of the peredvizhniki went over to this latter camp. Even such prominent representatives of democratic tendencies in art as Savitsky and Kramskoy were not always immune to the poesy of salon art. Subjects of social purport gave way to genre scenes of everyday life. In the case of Vladimir Makovsky, for instance, it was only his superb talent that enabled him to find and depict something of significance in his incidental subjects. There is the mark of smug self-satisfaction on this whole current of Russian art in the 1880's.

There were, however, certain artists of this decade whose attitude toward contemporary events was quite different. The political reaction of the period gave rise to a tragic conflict in their minds. Although none of them became professed and consistent revolutionaries or found any real solution for the situation which had arisen, they were one with the people in their realization of the oppression reigning in the country.

The names of these artists were Repin, Surikov and Levitan.

Fathoming the hidden aspirations of the people, they realized that the oppression, poverty and benightedness of the great masses of the peasantry, reflected in the art of the peredvizhniki, had not deprived the Russian people of the ability and the will to struggle. They perceived that the Russian people were endowed with tremendous creative powers, that they loved their country

and their national landscape. These artists realised that the Russian people were able to appreciate the greatness and the beauty of their country and to reflect it in their own creative work.

In the field of historical painting Surikov was the first to emerge beyond the limits set by the creed of the *peredvizhniki* while Levitan did the same in the field of landscape painting.

In order to divine the intrinsic beauty of their country behind the distortions of centuries of tsarist oppression, it was necessary to merge with the people, to penetrate the poesy of their life and their land. These were the traits that formed Levitan's greatest contribution to landscape painting. We have Levitan to thank for the broader conception of Russia permeated with a tender lyrical charm, that appeared from behind the squalid huts, ugly fences and muddy autumn roads.

But Levitan's work failed to win adequate appreciation from his contemporaries. The essence of his poesy is not to be found in the decorative effects of his paintings but in the depth of their insight into the life of nature, in the fullness of their expression of human feelings and their sensitive lyricism. For this reason Levitan was always an alien spirit to those who admired the tinsel glitter found in the pictures of Semiradsky and K. Makovsky. Another characteristic of Levitan's work that alienated him from his contemporaries was that he rejected the rationalistic coldness and doctrinairism which were held in such high esteem by the imitators of the peredvizhniki traditions. This was the reason why many of the peredvizhniki failed to understand Levitan's work to the full.

It must be noted, however, that Levitan was a direct, although not fully recognised, heir to all that was wholesome, democratic and vital in the art of the peredvizhniki.

After he left the Moscow Art School Levitan worked at his painting in the country near Moscow—in Zvenigorod, Abramtsevo, at the Chekhov's country house in Babkino and in the neighbouring village of Maksimovka. The hilly country near Moscow, covered with foliage and intersected by numerous rivers and streams, offered rich material for Levitan's observant eye. He recorded his impressions of these places in numerous sketches from nature and in a whole series



Vladimirka

of small paintings. In these two years, from 1884 to 1886, Levitan fully mastered the lessons of Polenov who was his teacher for a short time. It was Polenov who showed him how the most ordinary objects were miraculously transformed by the sunlight. His sketches entitled *The First Foliage* (1883), *The Little Bridge* and others of this period all show an optimistic, refreshing outlook on life. In them the spectator senses the joy felt by the artist looking directly at nature for the first time and eagerly drinking in the green of the leaves, shot through with sunlight—the warm, vibrant air—the play of light and shadow on water and grass.

During this period Levitan developed the experiments begun by Savrasov and Polenov, going much deeper than they and contributing much that was new to landscape painting. He was still far, however, from the mastery displayed in his later paintings.

In his pictures of these years there was as yet no crystallised conception of the Russian landscape. He sought out tiny, modest incon-

¹ This sketch formed the basis of a painting of the same title executed in 1887.

spicuous nooks and confined himself to depicting their intimate aspect. He did not seek broad horizons and majestic conceptions. On the contrary, Levitan at this time limited the scope of his pictures to small peasant yards and gardens. One advantage of this was that not a single detail contributing to the charm of the scene escaped his attention.

In the spring of 1886 Levitan made his first trip to the Crimea. There he continued his study of sunlight and tried to transfer to canvas the polychromatic beauty of the southern landscape. His efforts bore fruit in a series of superb sketches.

During his stay in the Crimea, however, he failed to produce a single finished painting. The Crimea somehow did not touch his innermost soul, did not arouse profound thoughts or feelings. The landscape did not harmonize with his temperament. The fact that it was pleasing to the eye was not enough to awaken the creative impulse within him.

His impressions of the Volga, which he first saw in a trip made in the summer of 1886, were of decisive significance for all his subsequent work.

There is reason to believe that Levitan was keenly interested in the Volga, that great Russian river which figures in so many folk songs, long before his first trip there. As he himself said in a letter to Anton Chekhov, he had expected much in the way of new impressions from the Volga, but his first acquaintance was something of a disappointment. It was a cold, rainy summer and the Volga, obscured by the incessant rain, remained mysterious and inaccessible to Levitan the artist. Yet its very mystery fascinated him. It may be that Levitan felt insufficiently prepared to express the new feelings that the Volga landscape aroused in him and this realisation tormented and depressed him.

The sweeping grandeur of the Volga landscape was a far cry from the intimate charm of the wooded, hilly country of Zvenigorod. All the objects that could catch one's eye were lost in the boundless stretch of its steppes. There remained only the sense of vast open spaces where the wind was free to work its will. In order to express the sweeping distances of the Volga landscape Levitan had to find broad, generalised lines and colour planes.

Despite the unfavourable circumstances of his first trip to the Volga Levitan was enchanted by the compelling beauty of the Russian steppes. He began to paint one of his finest pictures—Evening on the Volga. He spent the summer of 1887 in Savvino with the artist A. Stepanov and S. Kuvshinnikova. In the spring of 1888 he again went to the Volga with his friends and finished the picture he had begun the year before. There is a marked difference between the idea expressed in this picture and everything he had painted up to then.

Levitan perceived the Volga as free, calm, majestic and melancholy. This is the way he depicted it in his painting Evening on the

Volga.

The rounded contours of the banks suggested the smooth and powerful lines which are so characteristic of the Russian plains. They taught Levitan the secret of laconic and expressive drawing just as the distant blue horizons helped him to crystallise his colours. Beginning with this picture Levitan's subjects not only expressed deep emotion but were typical, generalised images of the artist's conception. This is the distinguishing characteristic of the second period of Levitan's career.

Levitan made four trips to the Volga. The summer of 1889 was one of the most productive for his painting. He did twenty-three pictures that year, among them his famous Evening, The Golden Reach, After the Rain and Golden Autumn. All these pictures are remarkable for their wonderful depiction of the artist's penetrating observations of nature in its most diverse aspects. Most interesting for a study of the evolution of Levitan's mastery is Golden Autumn. This picture already contains elements which came to full development only in the next phase of his work. Careful observation conclusively shattered the conception of the monotony of tone in Russian landscape. Gazing at the outlines of distant copses through the translucent air of a clear autumn day Levitan noticed subtle nuances in the play of colour. He was overjoyed at the discovery and hastened to transfer these delicate tones to his canvas. At last he had found in his own native Russian landscape the wealth of colour which had heretofore been considered an exclusive property of the luxuriant southern scene.

The Crimea, with its unchanging festive landscape, had somehow been alien to Levitan. Reproduced on canvas, it reminded him of the artificial emotions of academic art. The newly discovered beauty of the Volga landscape was all the dearer to him for being reserved and unassuming. He sensed real nobility in it, a nobility that needed no vulgar praise to prove its worth.

Only after this did Levitan allow himself to delight in the landscape spread before him. He rapturously transferred the golden beauty of the autumn birches to the foreground of his picture. He put all the joy of his discovery

into painting this spot of beauty.

All this time he was perfecting his technique to conform with the deeper content of his subjects. Working absolutely independently, never allowing himself to merely copy what he saw, Levitan reached the level of contemporary French painting in his technique. For this reason his first trip abroad in 1890 when he visited Munich, Paris and later Italy failed to make any very strong impression upon him. There was little he could learn from his fellow artists. He was their equal as far as technique was concerned and undoubtedly their superior as a poet.

Levitan's Italian pictures stand in the same



Golden Autumn

relation to his work as a whole as do his Crimean sketches, although they are more masterfully executed than the latter. Practically all of them would be considered major works in the productions of some less significant artist. In reference to Levitan's work, however, in which the content of a picture always goes beyond the limits of simple depiction, these pictures are no more than sketches from nature. Several of Levitan's Italian landscapes, nevertheless, are worthy of mention. There are some superb views of Bordighera. Spring in Italy and The Sea near Bordighera possess great charm.

After his return to Russia Levitan made another trip to the Volga. During this fourth and last trip he concluded his cycle of Volga pictures with the completion of *A Little Old Yard*, begun back in 1888. He also painted *A Ouiet Abode*.

We have now come to the central period in Levitan's work as an artist.

In the summer of 1891 which he spent at Pokrovskoye, the Panafidin estate near Zatishye in Tver Gubernia, Levitan began work on the first sketches for his picture At the Pool.

He spent the following year at Boldino, in Vladimir Gubernia and while there painted Vladimirka. This picture may rightfully be considered among the best of Levitan's paintings and also one of the finest productions of Russian realistic painting.

Critics who have written about Levitan have all, without exception, noted the lyrical character of his paintings. In everything he painted, he strove to express the feelings inherent in every person, whether they were feelings of joy, tenderness, sadness or despair. What makes Vladimirka distinct from Levitan's previous works is that these feelings were given a concrete-social expression in this picture. The mournful elegy of Vladimirka contains a note of protest against the arbitrary oppression that was crushing Russia under its heel and that brought pain to the artist's heart.

There is a story that Levitan presented one of the first sketches of this painting to the brother of the writer Anton Chekhoy, who was preparing to become a public prosecutor.

The inscription which Levitan wrote on the picture read as follows. "To Mikhail Chekhov, future public prosecutor, from I. Levitan."

In this autograph to the young attorney Levitan expressed regret at the latter's choice of a profession directed at the enslavement of the best people of his country.

Chekhov, it may be noted, did not accept

the gift.

The painting *Vladimirka* is remarkable for the fact that the idea it conveys is inseparably bound up with the visual image embo-

died in the picture.

In putting his idea on canvas, Levitan did not approach his theme as an illustrator who keeps close to the factual characterisation of the object concerned. A whole series of preliminary sketches made for Vladimirka testify to the changes Levitan made in the original scene. He strove to show that Vladimirka was different from all the other roads intersecting the Russian land, that it was the sorry road travelled by the finest representatives of Russian society—those who struggled for its emancipation—and by thousands of Russian people whom slavery and poverty had driven to crime. For this reason Levitan cast aside everything that might detract the spectator's attention from the road itself. He subordinated everything in the picture to its steady, slow forward movement, Monotonous and cheerless, it predominates over the bluish haze in the distance and over the copses at either side.

The charm of the distant horizons and the copses fails to dispel the feeling of oppressive despair evoked by the road itself. Their inaccessibility to the traveller setting foot on *Vladimirka* heightens this feeling of poignant melancholy. The traveller on this road must perforce leave all this behind him, together with his freedom and his happiness.

Levitan made apt use of both composition and colour to achieve the impression he wanted. The focal point of the picture's composition is the road itself. The thickets and the wayside cross emphasize its slight curves and serve to arrest the spectator's glance from the receding distances. The narrow winding footpaths running parallel to the road stress the contrast of the vast spaces stretching before the spectator's view. The same impres-

sion is achieved by the rhythmic alternation of the almost imperceptible hills. The low horizon intensifies the feeling of boundless plains. The whole composition is based on a concise but expressive style of drawing which Levitan had thoroughly mastered by this time.

In this picture the artist deliberately avoided vivid colour contrasts. He limited his palette to a small number of closely related tones. They were quite adequate, however, to convey the austere harmony of a dismal, cold day.

The year in which Levitan's Vladimirka appeared was marked by an event that showed the attitude of the tsarist government toward the finest Russian artists. Levitan was ordered to leave Moscow as a Jew who had no right to reside in the capital. The artist and his friends had to expend much effort before this order was rescinded.

Levitan spent the years of 1893 and 1894 working on his picture *Eternal Rest*, the picture which he himself considered the greatest work of his whole career.

For the first and probably the only time in his life, however, Levitan departed from his usual method in this picture and made an attempt to use a concrete image from real life as a symbol for expressing an abstract idea. As a result, the image immediately lost the clarity so characteristic of Levitan's work. This opened the way for all sorts of idle talk not only about this picture but about all his work in general. It was cause for Levitan being called a mystic, a petty bourgeois intellectual and a hopeless pessimist. And yet previous and subsequent work completely refuted such groundless charges. The very picture which started such talk gave no ground for such judgement.

In the idea it conveys, the painting Eternal Rest is essentially close to Vladimirka. A keen realisation of the oppression that reigned in Russia forms the essence of both these pictures. It was precisely this realisation which gave Levitan the idea of man's helplessness to cope with fate and of the utter futility of human efforts. This conception became more deeply rooted under the influence of the contradictions which Levitan saw between the magnificent aspects of nature and the surfeit of vulgarity in public life.

In Eternal Rest Levitan wanted to express the philosophical content of the principal ideas and moods contained in his paintings.



March

It was for this reason that he considered the picture the most important work of his career.

When Levitan attempted to divert his ideas and moods from the concrete conditions of social life and make an immutable law of what was really a consequence of a definite social situation, his philosophy acquired an idealistic bent. The content of *Eternal Rest*, therefore, could not be expressed other than in an abstract theme of oblivion and death, in a symbolic contrast of the "eternal rest" of a neglected cemetery to the eternal life of nature.

Despite the idealistic limitations of his philosophy, Levitan remained a great realist in this picture. Love for living reality, which in Levitan's work took the form of a passionate veneration for his native landscape, helped him to convey the magnificent beauty of north Russia in the expanse of Lake Udomla, the scene of this picture.

There is also a profound lyrical feeling embodied in the picture. Levitan displays an almost tragic intensity here in his expression of that same feeling of overpowering love for his country and grief for its fate which he felt so keenly when painting *Vladimirka*.

In 1895 he went abroad for the second time, travelling to Switzerland by way of Vienna. He brought back a large number of superb Alpine sketches from this trip.

From this time on and to the end of his life, optimism was the predominating note in Levitan's work. Elements of this had been apparent in *Golden Autumn*, painted in 1889, but were now developed to the full.

In 1895 Levitan completed his painting A Brisk Wind which he had probably conceived during the last trip to the Volga and which he had begun in 1891.

Five years before, Levitan had evidently lacked confidence in his ability to carry out

the idea he then had for this picture. The major chord of red and blue tones might create an impression of inept decorativeness if taken in the wrong relation. Desirous of avoiding this error and striving primarily to convey the vital sense of reality, Levitan worked long and tenaciously on mastering the secret of colours and the laws for their interplay. Only after he was absolutely sure of himself did he allow the picture to leave his studio. By the time this painting was finished Levitan was already a virtuoso in the technique of colour. He no longer hesitated to use striking contrasts and his pictures of this period are amazing for the variety of his palette. The beauty that he had discovered in the Russian autumn was sung in a whole series of superb paintings. Among the best are the Golden Autumns of 1895 and 1896. In them Levitan has conveyed every nuance of colour with the utmost intensity. The glow of colours is heightened by the device of placing tones in contrast to each other. This does not, however, create any impression of a motley riot of colour since the variety is reduced to a harmonic unity. Such harmony, however, has nothing in common with an artificially selected combination of colour tones. Levitan was able to perceive the true wealth of colour in nature itself and had no need to resort to artificial means.

In his art Levitan attained the genuine poesy which can be found only in life itself, a poesy that is infinitely richer than anything created by the human imagination.

Levitan used colour in a multitude of ways. Delighting in its beauty, Levitan employed the most delicate and subtle tones to convey the vibration of light and air. His silver-rose tones in Spring, painted in 1897, superbly depict the moisture-laden atmosphere of a spring day when the earth is just appearing from under the melting snow. The air, in whose quivering agitation one seems to feel the very breath of nature, its innermost, mysterious life, fills all the pictures of Levitan's last years. In each successive picture, however, Levitan found ever newer ways and means of expression that brought his mastery to a still higher level. During this last period he also tried his hand at pastels. In the softness of pastel technique colour attains an unusual depth and softness of tone which makes it admirably suitable for depicting the vibrancy of the air. In Levitan's capable hands pastels became a superb medium for tonal painting.

In the pastel A Gloomy Day Levitan found such nuances and variety in the single tone of grey that this picture may well be called a masterpiece of technique. The same skill is shown in another of his pastels—A Meadow at the Edge of a Forest.

From the vantage point of these last works we can see with striking clearness the tremendous effort expended by Levitan in the course of his career and the heights which he attained.

From chamber lyricism he rose to a tragic intensity of feeling, from an expression of small, individual phenomena to a comprehension of the complex life of all nature, from a purely external characterisation of the national landscape of his country to the creation of its poetic image.

Towards the end of his life Levitan felt the desire to summarise the results of his life work. He thought of creating a large picture which would combine the achievements of individual earlier paintings. He wanted this picture to express his conception of Russia.

This idea was realised in the picture known as *The Lake*, painted in the last year of his life. But the very fact that Levitan altered its title (the painting was originally to have been called *Russ*) indicates that the artist did not consider his interpretation of the theme a final one. Had he lived longer he might have attained the desired result. It is also within the limits of probability that the opposite might have happened. Levitan might have relinquished the idea of creating a symbolic image.

In any case this is one more proof that for Levitan the idea of native land was filled with a solemn and proud beauty.

Levitan's work as an artist is not confined to his own paintings. In 1898 he became head of the class in landscape painting at the Moscow School of Painting, Sculpture and Architecture. He was fully as interested in his work at the School as he was in his own work as an artist. At this time the heart disease from which he suffered was already seriously affecting his health.

Strange as it may seem there is no suggestion of any gloomy foreboding of death in any of the pictures painted during the last few years of his life. In 1899 he went to Paris. This was his last trip abroad. He was



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much more interested in western European art this time than in his previous trips and singled out a number of French artists, among them Claude Monet for particular study. At the advice of his physician he went to the Crimea in the spring of 1900 and there his love for life bore fruit in a whole series of pictures that are amazing for their optimism. At the beginning of the summer Levitan returned to Moscow, hopelessly ill. This did not prevent him, however, from carrying on with his painting and with his work as a teacher. He died on July 22, 1900, not having yet reached the age of forty.

The heritage left by Levitan is tremendous. It consists not only of the many pictures and sketches which he painted but also of the lessons to be learned from the development of his remarkable talent.

Boundless love for life in all its manifestations, love for country and a lofty humane outlook made Levitan a great realist, the singer of the national Russian landscape.

Levitan cherished and appreciated the best traditions laid down by the artists of the generation preceding him. Carrying the development of Russian landscape painting farther than had the older generation, he deepened the healthy, truly national elements it contained. By depicting the lofty poesy and beauty of the Russian landscape in his paintings he made art close and comprehensible to the people.

By showing his country in its real beauty, Levitan became one of those who taught the Russian people to love their country, and imbued them with feelings of patriotism.

